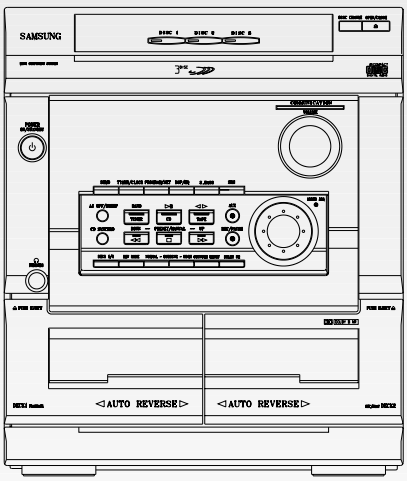
SAMSUNG

3 CD CHANGER
MINI MINI COMPONENT
MAX-850(R)/860/858(R)/868

SERVICE Manual

3CD CHANGER MINI COMPONENT



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ELECTRONICS

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1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children--might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

4. Design Alteration Warning:
   Never alter or add to the mechanical or electrical design of the unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

5. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

   With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, etc.) and all exposed metal parts. Examples: Handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat.

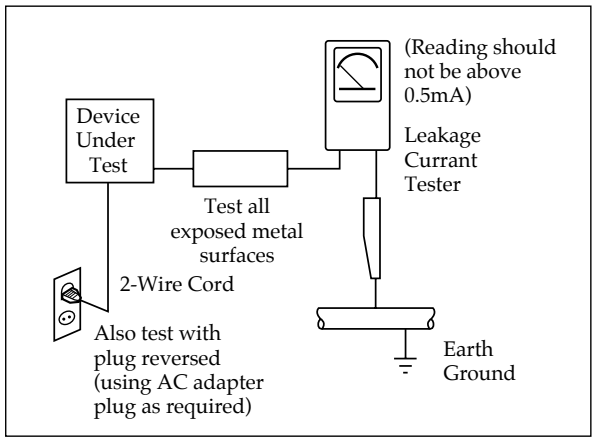

(Reading should not be above 0.5mA)
Device Under Test
Leakage Currant Tester
Test all exposed metal surfaces
2-Wire Cord
Also test with plug reversed (using AC adapter plug as required)
Earth Ground

Fig. 1-1 AC Leakage Test

6. Insulation Resistance Cold Check:
   (1) With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. (2) Set the power switch to ON. (3) Measure the resistance between the shorted AC plug and any exposed metallic parts. Example: Screwheads, antenna, control shafts or handle brackets.

   If any of the exposed metallic parts has a return path to the chassis, the measured resistance should be between 1 and 5.2 megohms. If there is no return path, the measured resistance should be "infinite." If the resistance is outside these limits, a shock hazard might exist. See Figure 1-2

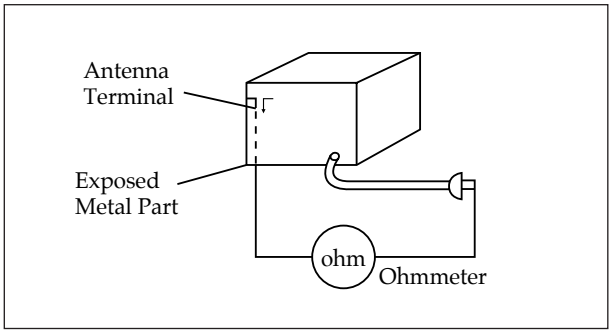


Fig. 1-2 Insulation Resistance Test

1-1 Safety Precautions (Continued)

7. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards

8. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that no wires or components touch thermally hot parts.

9. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

10 Components that are critical for safety are indicated in the circuit diagram by shading, ⚠ or ⚠ . Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

1. Servicing precautions are printed on the cabinet. Follow them.

2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.

3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring may be clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.

5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).

6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

8. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs). Examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.

4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.

5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.

6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static" (these can accumulate sufficient electrical charge to damage ESDs).

7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.

8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.

9. Minimize body motions when handing unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4 Special Precautions and Warning Labels for Laser Products

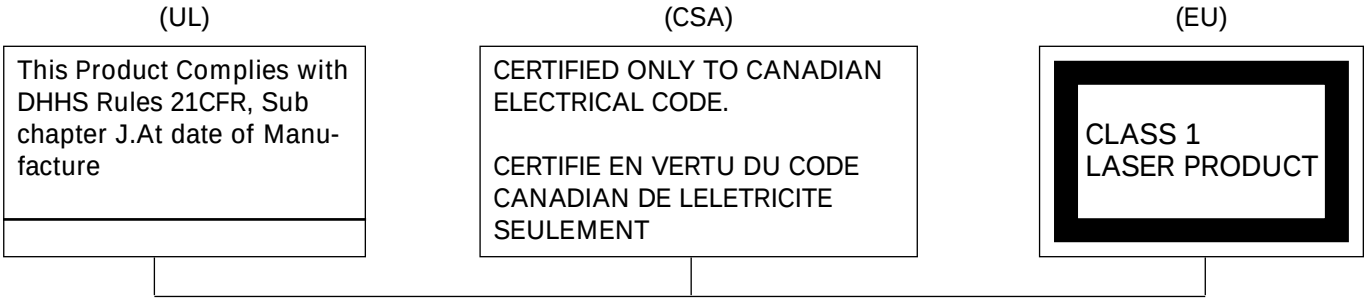

(UL)
This Product Complies with DHHS Rules 21CFR, Sub chapter J.At date of Manu-facture
(CSA)
CERTIFIED ONLY TO CANADIAN ELECTRICAL CODE.
CERTIFIE EN VERTU DU CODE CANADIAN DE LELETRICITE SEULEMENT
(EU)
CLASS 1
LASER PRODUCT

Fig. 1-3 Warning Labels (Location: Enclosure Block)

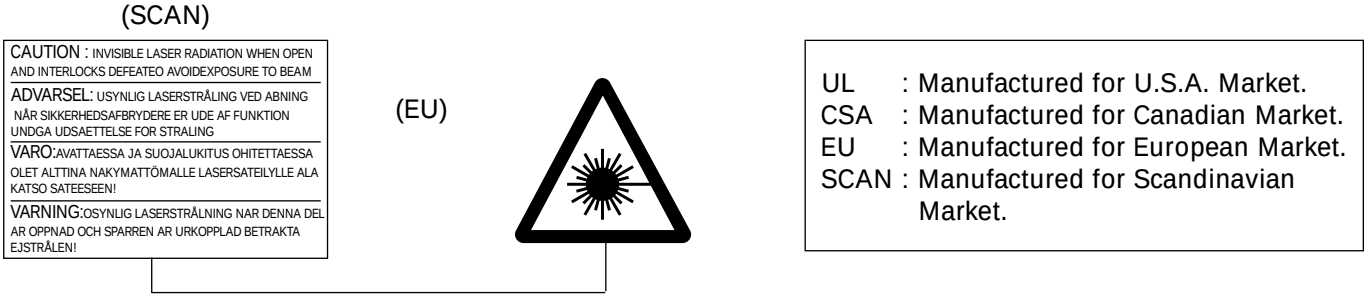

(SCAN)
CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATEO AVOIDEXPOSURE TO BEAM
ADVARSEL: USYNLIG LASERSTRÅLING VED ABNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGA UDSAETTELSE FOR STRALING
VARO:AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTINA NAKYMATTÖMALLE LASERSATEILYLLE ALA KATSO SATEESEEN!
VARNING:OSYNLIG LASERSTRÅLNING NAR DENNA DEL AR OPPNAD OCH SPARREN AR URKOPPLAD BETRAKTA EJSTRÅLEN!
(EU)
UL : Manufactured for U.S.A. Market.
CSA : Manufactured for Canadian Market.
EU : Manufactured for European Market.
SCAN : Manufactured for Scandinavian Market.

Fig. 1-4 Warning Labels (Location: Disc Clamper, Inner Side of Unit Door or Nearby Unit Chassis)

1-4 Special Precautions and Warning Labels for Laser Products (Continued)

1-4-1 Warnings

1. When servicing, do not approach the LASER exit with the eye too closely. In case it is necessary to confirm LASER beam emission, be sure to observe from a distance of more than 30 cm from the surface of the objective lens on the optical pick-up block.

2. Do not attempt to handle the objective lens when the DISC is not on the tray.

1-4-2 Laser Diode Specifications

Material: GaAs+ GaAlAs
Wavelength: 760-800 nm
Emission Duration: Continuous

Laser Output: 0.2 mw (measured at a 1.6 mm distance from the objective lens surface on the optical pick-up block.)

1-4-3 Handling the Optical Pick-up

1. Static electricity from clothing or the body may cause electrostatic breakdown of the laser diode in the Optical Pickup. Follow this procedure:

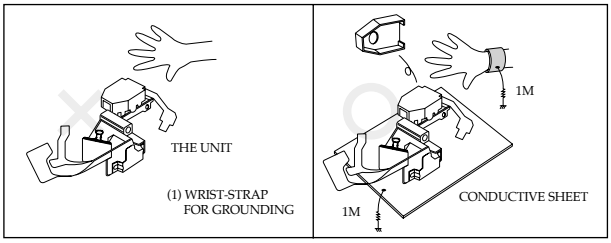
2. Place a conductive sheet on the work bench (i.e., the black sheet used for wrapping repair parts.) Note: The surface of the work bench should be covered by a copper ground plane, which is grounded.

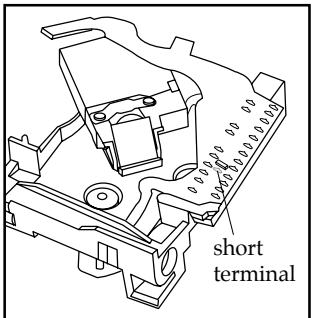
3. The repair technician must wear a wrist strap which is grounded to the copper sheet.

4. To remove the Optical Pickup block: Place the set on the conductive sheet, and momentarily touch the conductive sheet with both hands. (While working, do not allow any electrostatic sources--such as clothes--to touch the unit.)

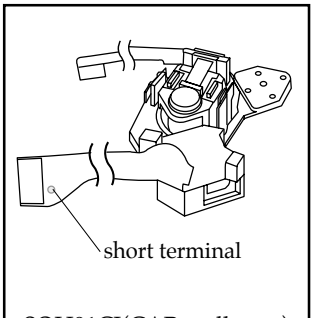
5. Ground the "Short Terminal" (located on the PCB, inside the Pickup Assembly) before replacing the Pickup. This terminal should be shorted whenever the Pickup Assembly is lifted or moved.

6. After replacing the Pickup, reopen the Short Terminal. See diagrams below:

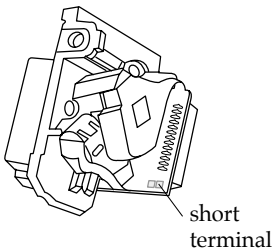




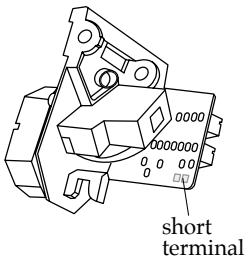
SOH91VI(LDP)



SOH91CI(CAR,walkman)



SOH-A1
(CMS-V10,CMS-V30)



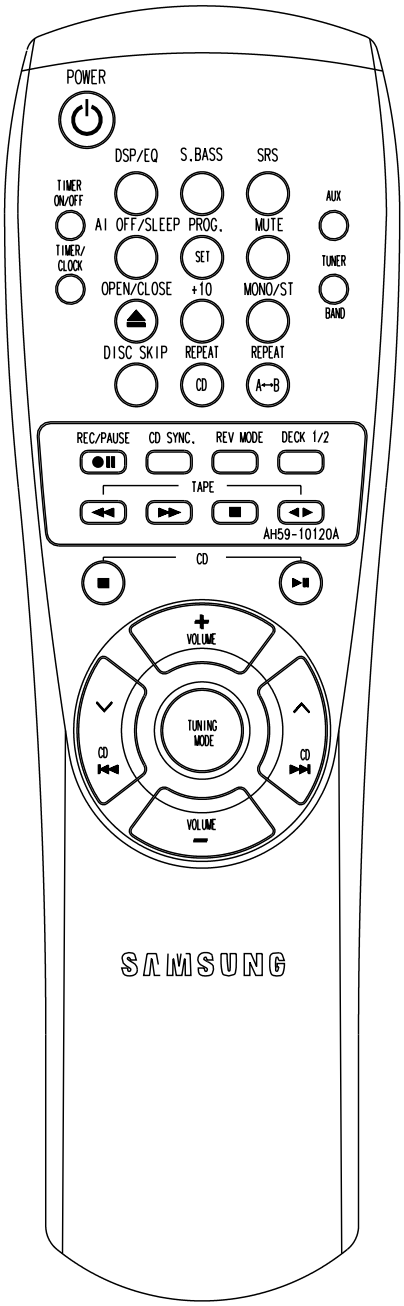
SOH94T4N
(CMS-V10,CMS-V30)

2. Product Specfications

General		Power source Power consumption - MAX-850 - MAX-860 Dimensions (mm)	AC 230V 50HZ (option) 280W 340W 270(W) x 317(H) x 340(D)
Amp		Power output (Front) - MAX-850 - MAX-860 Total harmonic distortion Frequency response Signal to noise ratio Channel separation Input sensitivity - Mic - Aux	 80W / Ch(6Ω) (THD 10%) 100W / Ch(6Ω) (THD 10%) 0.08% (1kHz) 30Hz ~ 30kHz 80 dB 50 dB (1kHz) 5mV (±3) 400mV (±80)
Tuner	FM	Frequency range Usable sensitivity Signal to noise ratio IF rejection ratio Total harmonic distoration Separation (Stereo)	87.5 ~ 108MHz 10 dB 62 dB 60 dB 0.3% 35 dB
	MW (AM)	Frequency range Usable sensitivity Signal to noise ratio IF rejection ratio Total harmonic distortion	522 ~ 1611KHz 54 dB 40 dB 30 dB 2%
	LW (option)	Frequency range Usable sensitivity Signal to noise ratio	146 ~ 290KHz 60 dB 35 dB
Cassette		Frequency range WOW FLUTTER Erasing effect Signal to noise ratio Total harmonic distortion	125Hz ~ 12.5KHz(-5dB) 0.15% 60 dB 40 dB 2.5%
Compact Disc		Frequency response Signal to noise ratio Channel separation Total harmonic distortion Audio Output	20Hz ~ 20KHz(±1dB) 90 dB(1kHz) 75 dB(1kHz) 0.1% (100Hz) 0.05%(1kHz) 0.2% (10kHz) 1V (1kHz 0dB)

Specifications are subject to change without notice.

Remote Control



3. Disassembly and Reassembly

3-1 Cabinet-Top

* If power is connected ;

1. Turn power on and open the CD ,push the Door-CD in the direction of arrow to remove.
2. Remove 7 screws ①, ② holding the Cabinet-Top.
   Lift the back of the Cabinet-Top and shade it to the rear to remove.

* If power is not connected ;

Remove the Cabinet-Top and Turn the Gear the clockwise using the hand as shown in figure 3-1-1.
Open the Door-CD and pull the Tray in the direction of arrow ②.

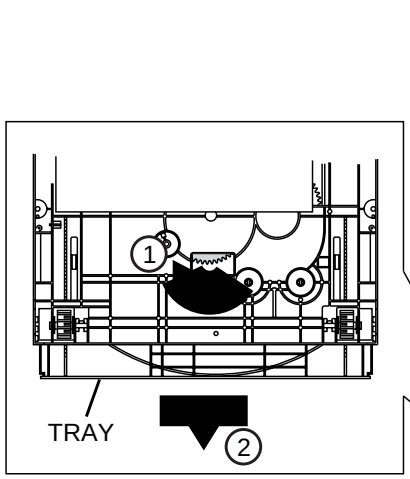


Figure 3-1-1

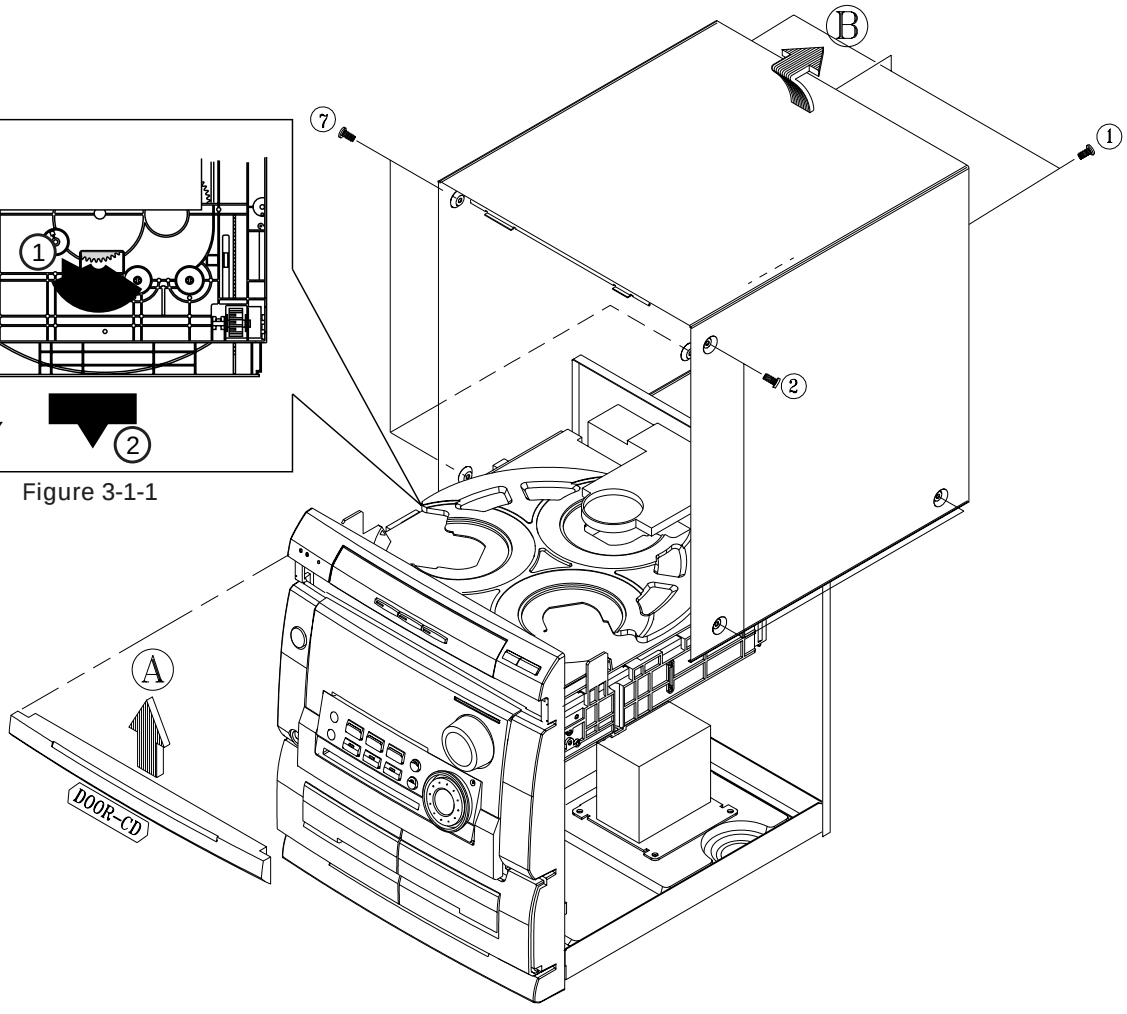


Figure 3-1

3-2 CD-Mecha, Door-CD

1. Remove 4 screws ③, ④.
2. Lift the back of the CD-Mecha to remove.

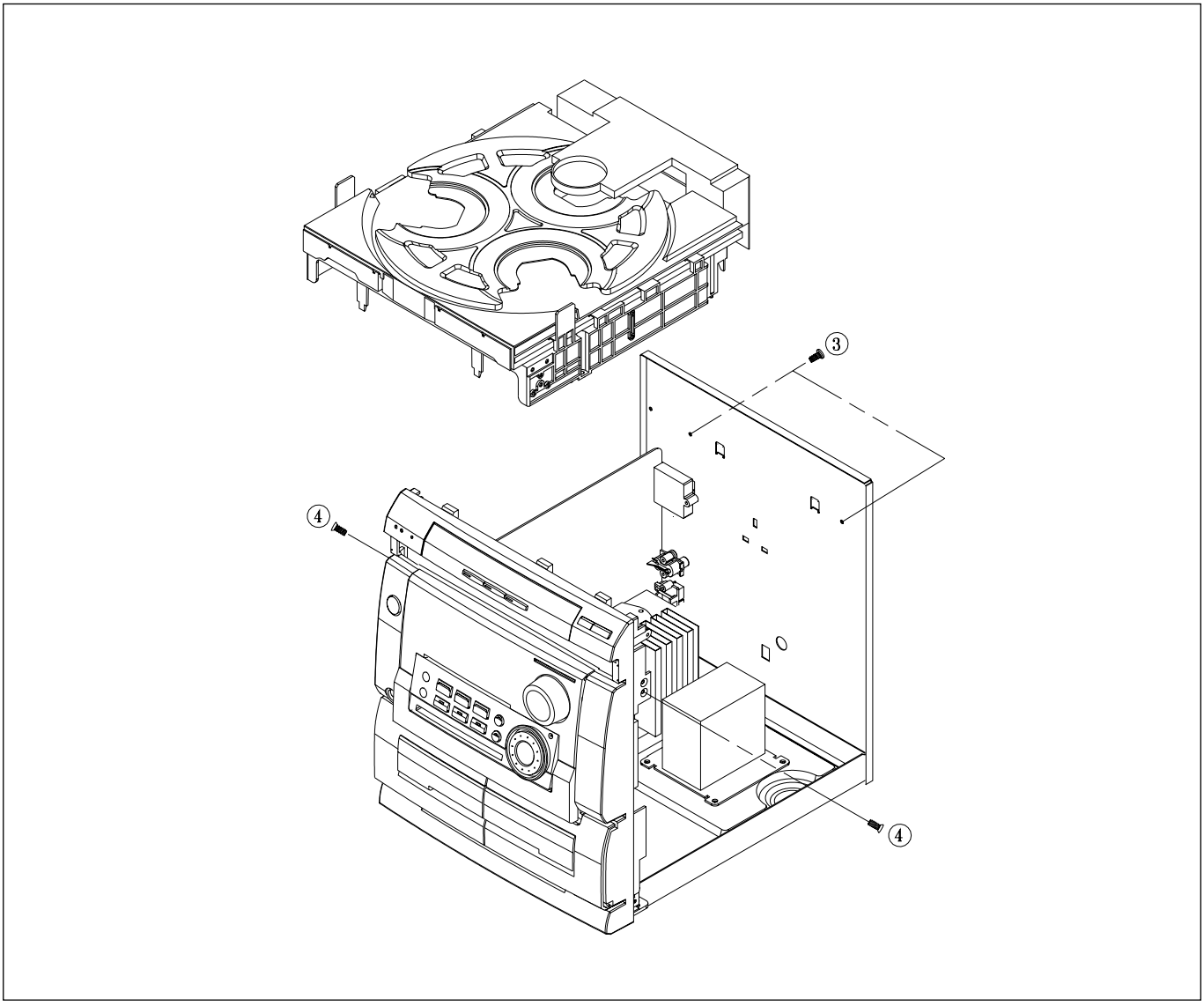


Figure 3-2

3-3 Cabinet-Rear and Main PCB

1. Remove 9 screws ⑤.
2. Lift the Cabinet-Rear and slide it to the rear by releasing the hook of Cabinet-Bottom.
3. Remove 2 screws ⑥ and slide the Main PCB to the rear to remove.

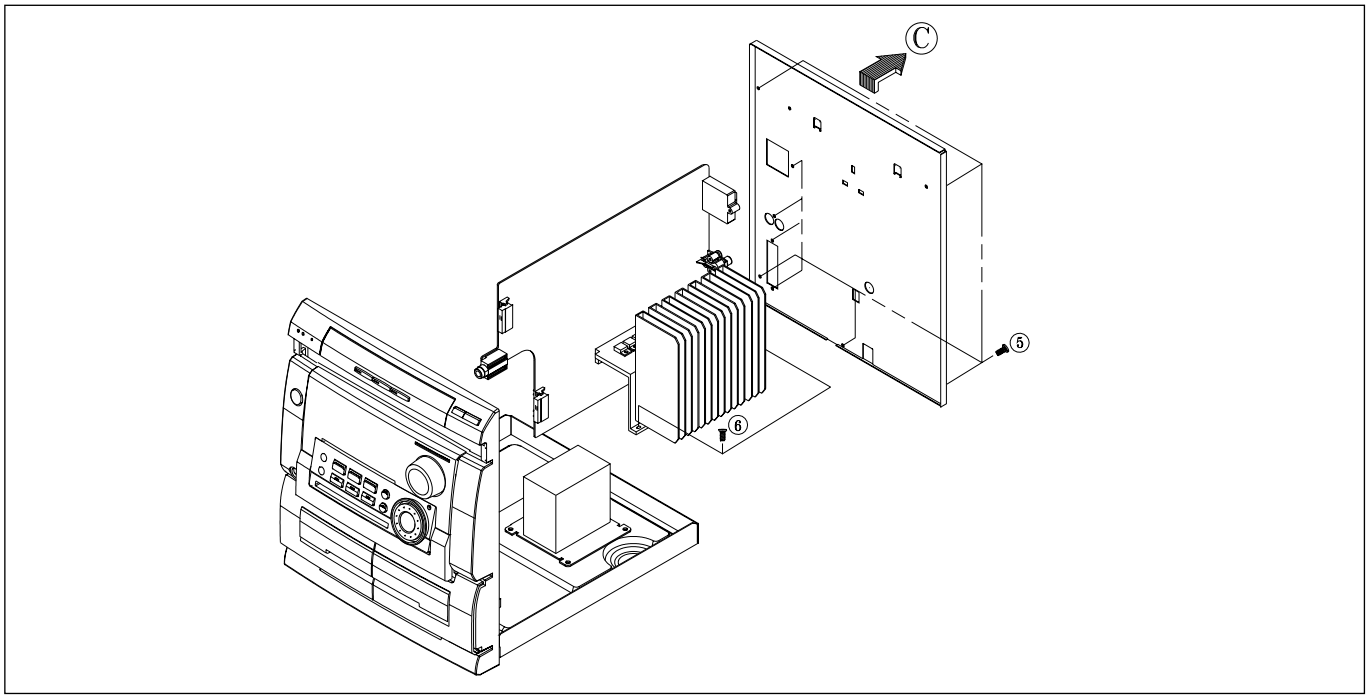


Figure 3-3

3-4 Cabinet-Front and Cabinet-Bottom

1. Remove 2 screws ⑦.
2. Slide it to the front by releasing two hooks on the bottom of Cabinet-Front to remove.

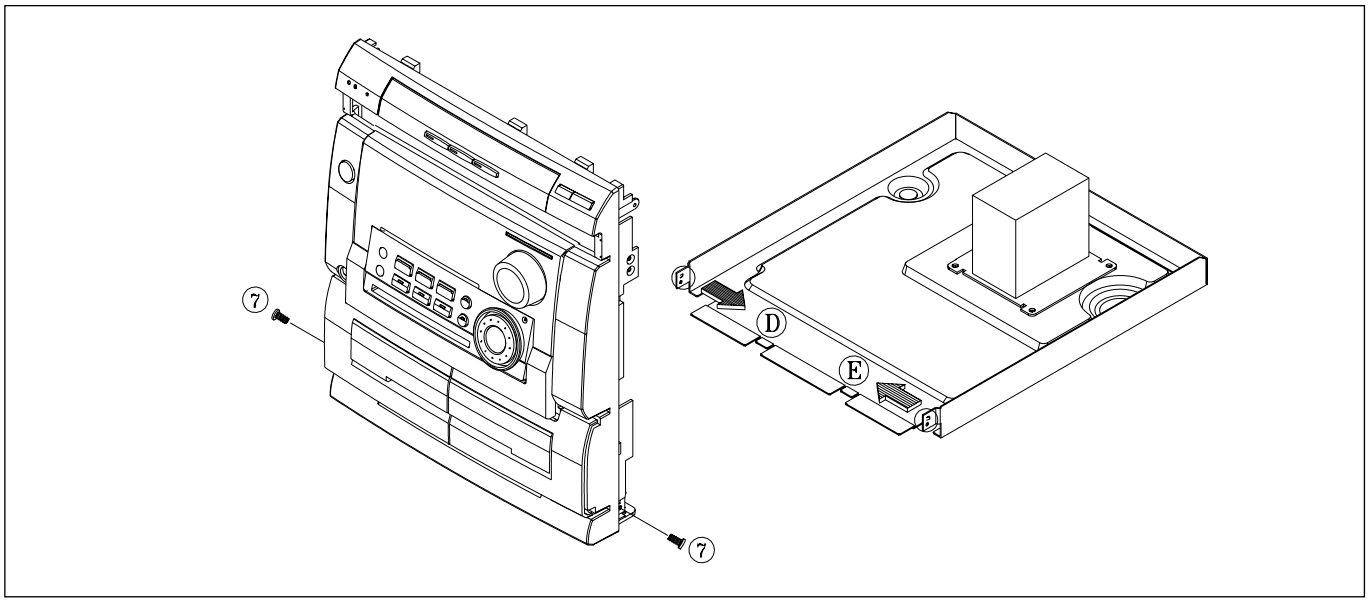


Figure 3-4

3-5 CD Mecha

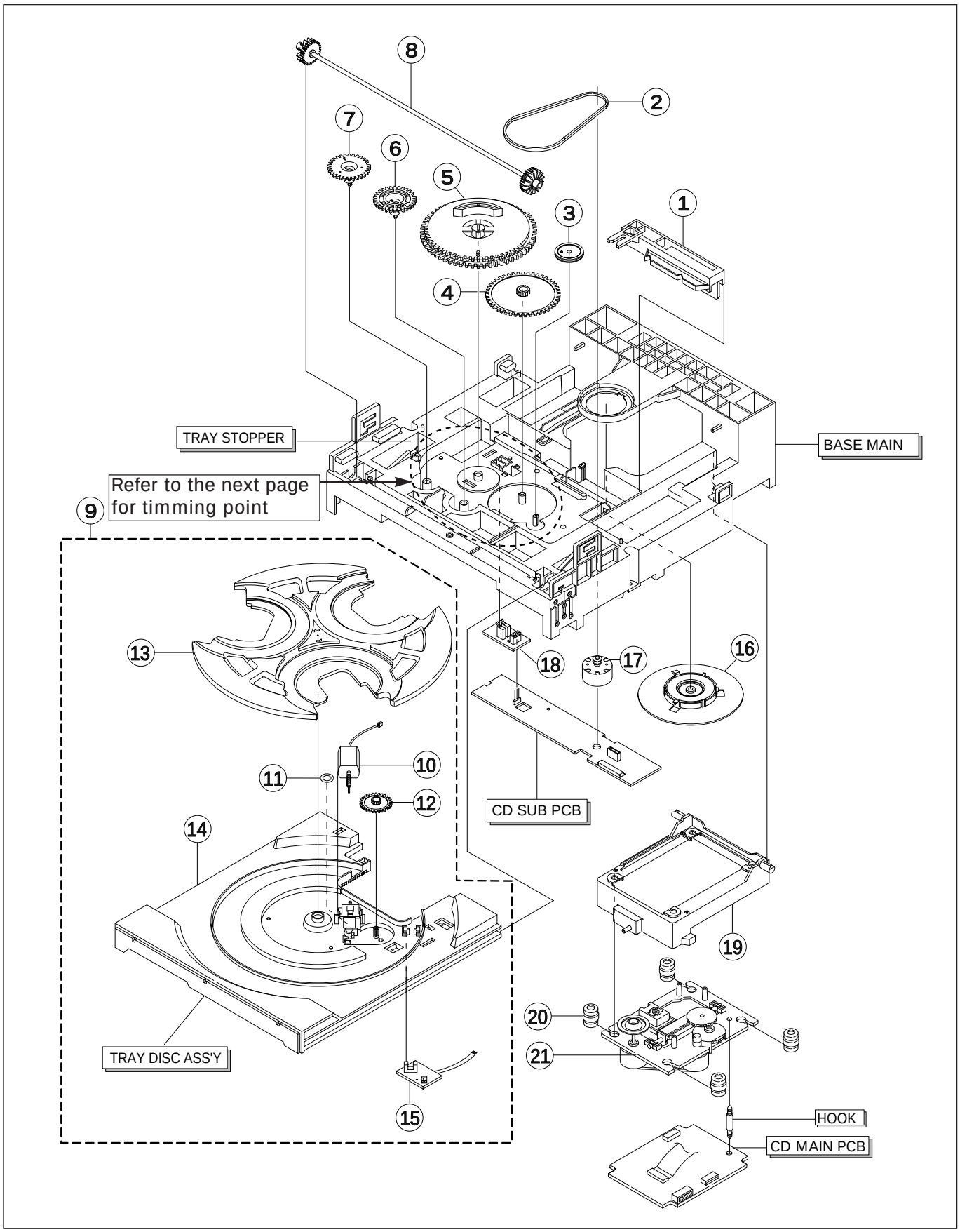


Figure 3-5

3-5 CD Mecha Continued

*When removing, take extreme care not to damage the hook.
1. Open the Tray Disc Ass'y by turning the Gear-Load(⑤) in the direction of open,then remove the Wire-Tray(㉕).
2. Remove two Tray-Stopper and tray.

3-5-1 Tray Disassembly

1. Remove the Tray-Roulette(⑬) from the Tray-Disc Ass'y(⑭) by releasing the hook.
2. Remove the PCB-Sensor Ass'y(⑮) from the tray by releasing the hook.
3. Remove the Worm-Motor Ass'y(⑩)from the Tray-Disc Ass'y(⑭).
4. Remove the Cushion-Motor(⑪) from the Tray.
5. Remove the Gear-Roulette(⑫) from the Tray-Disc Ass'y(⑭) by releasing the hook.

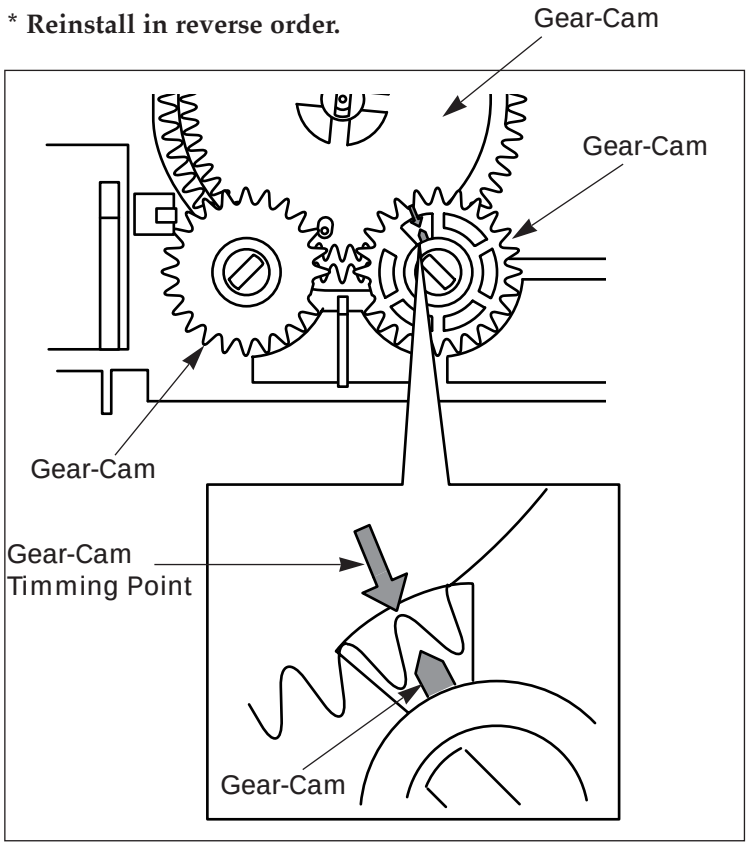
3-5-2 Main Disassembly

1. Remove the Table-Chuck Ass'y(⑯) from the Base-Main by turning it.
2. Push the Slider-Cam(①)towards right, then lift it up to remove.
3. Remove the Gear-Tray(⑥) from the Base-Main by releasing the fixed hook.
4. Remove the Gear-Converter(⑦)from the Base-Main by releasing the fixed hook.
5. Remove the Gear-Cam(⑤) from the Base-Main by releasing the fixed hook.
6. Remove the Belt(②) from the Pulley-Motor Ass'y(⑰) & the Gear-Pulley(③).
7. Remove the Gear-Pulley(③) from the Base-Main by releasing the fixed hook.
8. Remove the Gear-Load(④).
9. Remove the Gear-Synchro(⑧).
10. Desolder two soldering points of the CD SUB PCB, then remove it from Base-Main by releasing the hook.
11. Remove the Pulley-Motor Ass'y(⑰) by releasing the hook.
12. Remove the PCB-SW Ass'y(⑱) by releasing the hook.

3-5-3 CD Main PCB Disassembly

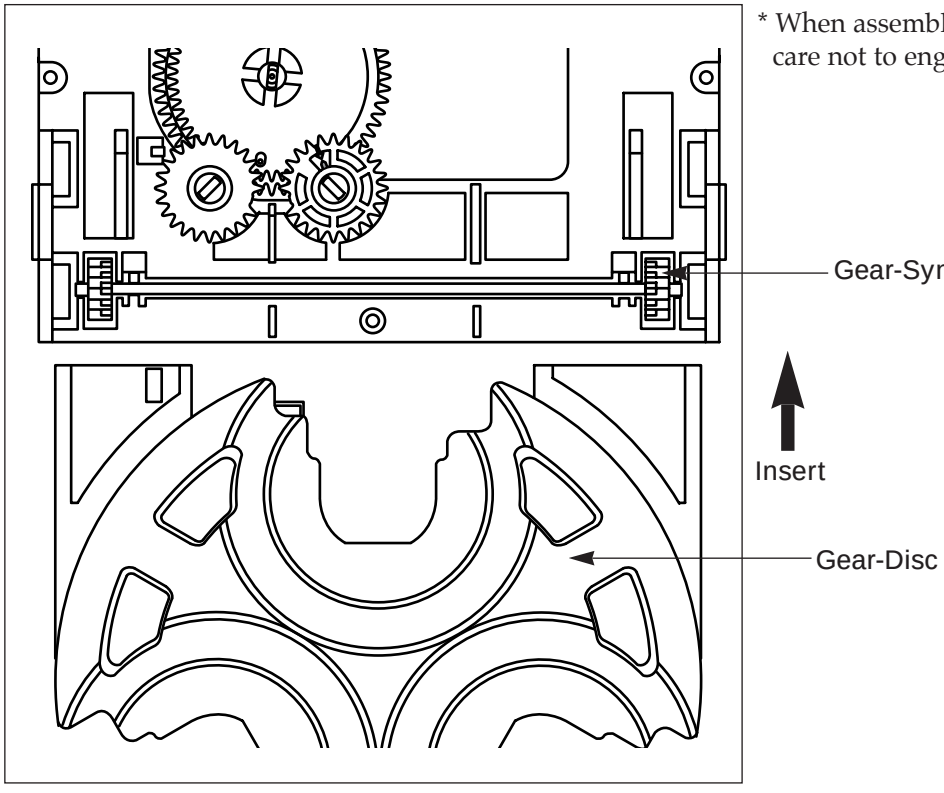
1. Remove the Lever-Lifter(⑲) from the Base-Main by releasing two hooks.
2. Remove four Rubber-CD(⑳) from the Lever-Lifter and then remove the Deck-CD(㉑).
3. Remove the Hook.
4. Remove the CD MAIN PCB with the soldering iron.

*** Reinstall in reverse order.**



* Align the Gear-Cam with the Gear-Tray as shown ing Figure 3-6, then mount the Tray-Disc.

Figure 3-6



* When assembling the Tray-Disc,take extreme care not to engage with Gear-Synchro.

Figure 3-7

3-6 CD Deck

1. Remove the Shaft ①.
2. Lift the P/U ②.
   Note : Take extreme care not to touch the surface of lens.
   If there is an alien materials, clean it with swab smeared alcohol.
3. Lift the Center-ring ③.
4. Remove the Spring-T/Table ④.
5. Remove the Turn-Table (M) ⑤.
6. Remove 2 screws ⑥ and then remove the Spindle-Motor ⑦.
7. Remove the Cover-Gear ⑧ by pushing the hook.
8. Remove the Gear (c) ⑨ by pushing the hook.
9. Lift the Gear(b) ⑩.
10. Remove the Gear(a) ⑪.
11. Remove 2 screws ⑫ and the then remove the Feed-Motor ⑬.
12. Remove the Chassis-Deck (M) ⑭.

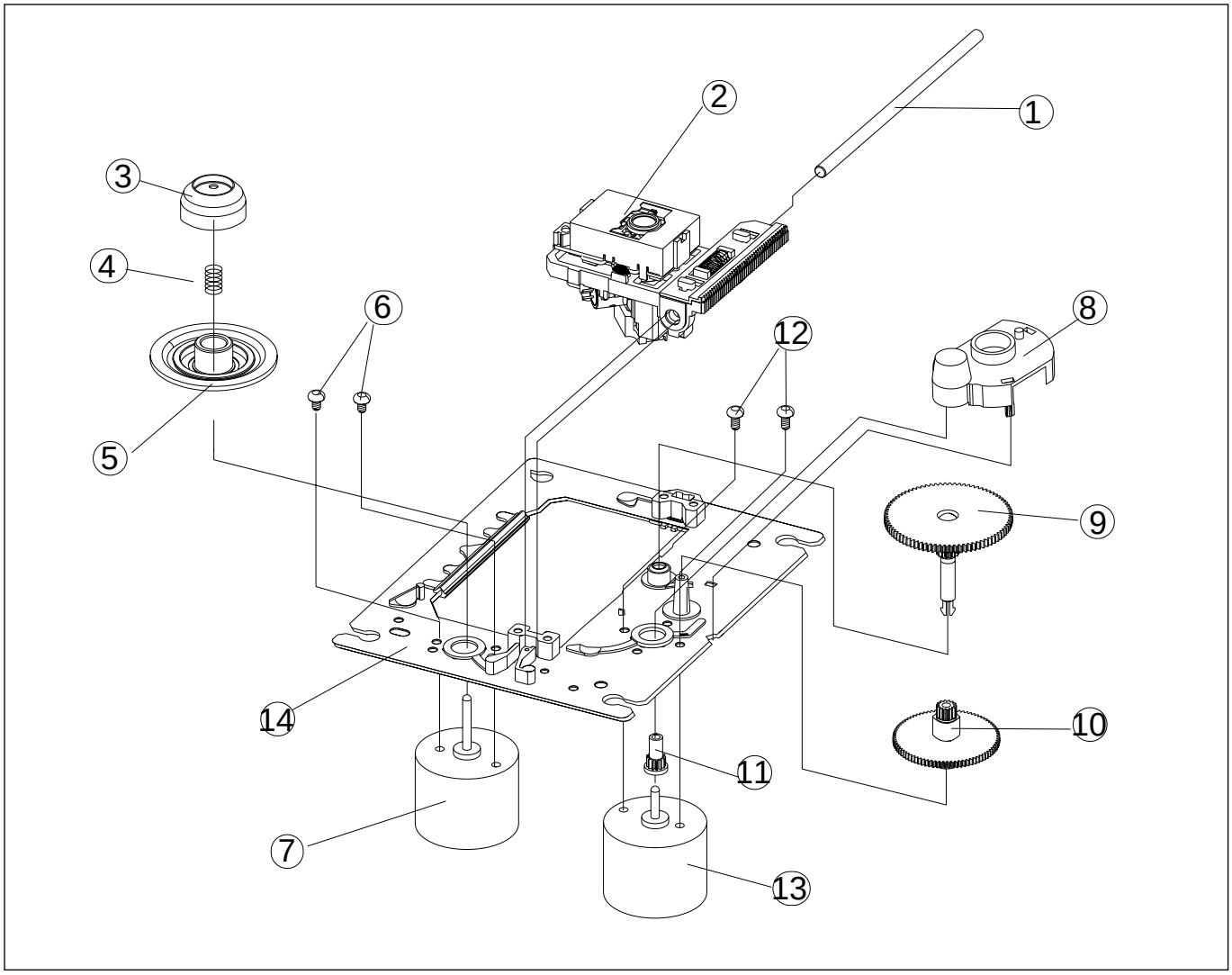


Figure 3-8

3-6 CD Deck (Option)

1. Remove the Shaft ①.
2. Lift the P/U ②.
   Note : Take extreme care not to touch the surface of lens.
   If there is an alien materials, clean it with swab smeared alcohol.
3. Lift the Center-Knob ③.
4. Remove the Center-ring ④.
5. Remove the Spring-T/Table ⑤.
6. Remove the Turn-Table(M) ⑥.
7. Remove 2 screws ⑦ and then remove the Spindle-Motor ⑧.
8. Remove the Cover-Gear ⑨ by pushing the hook.
9. Remove the Gear(c) ⑩ by pushing the hook.
10. Lift the Gear(b) ⑪.
11. Remove the Gear(a) ⑫.
12. Remove 2 screws ⑬ and then remove the Feed-Motor ⑭.
13. Remove the Chassis-Deck(M) ⑮.

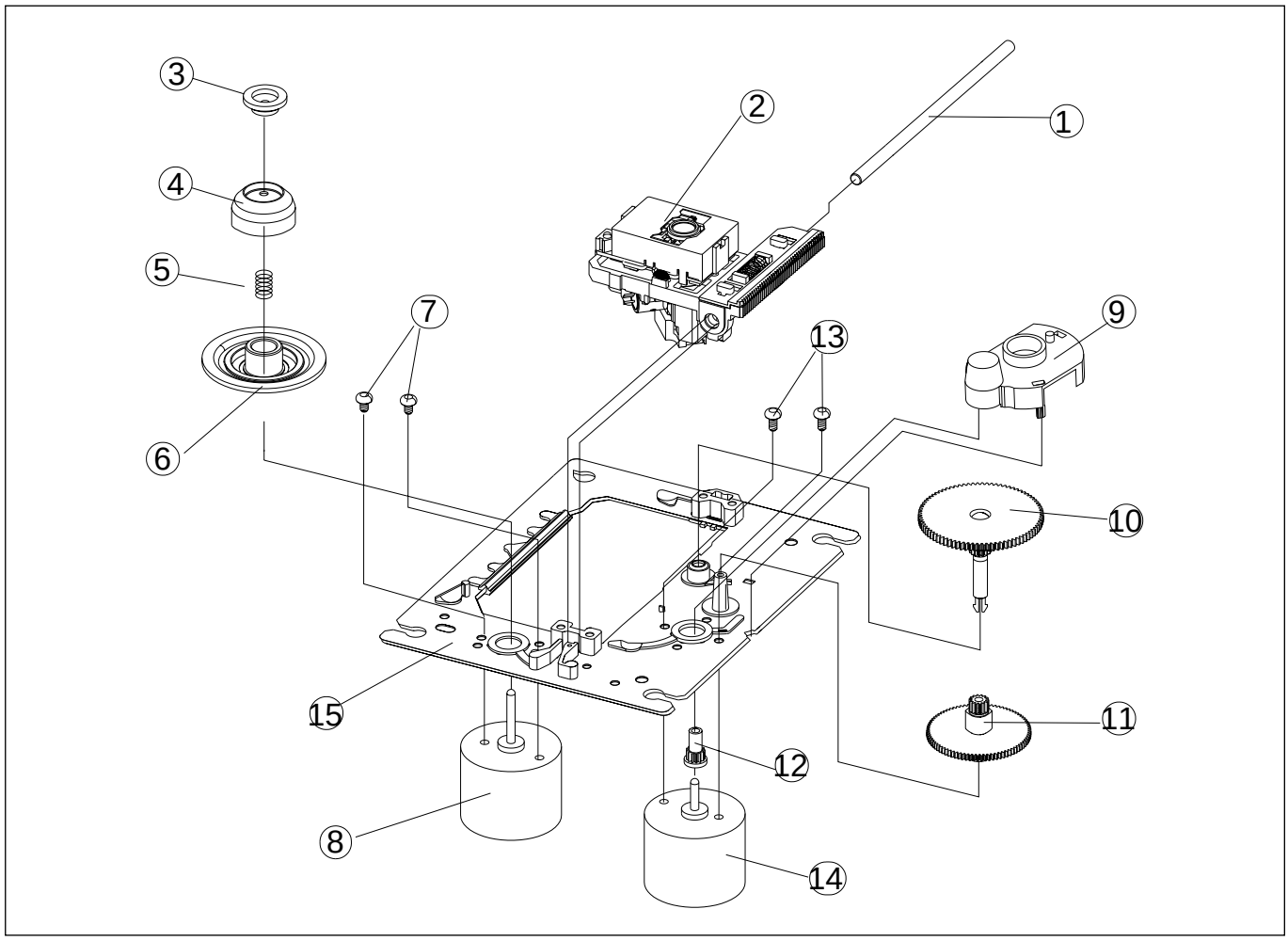
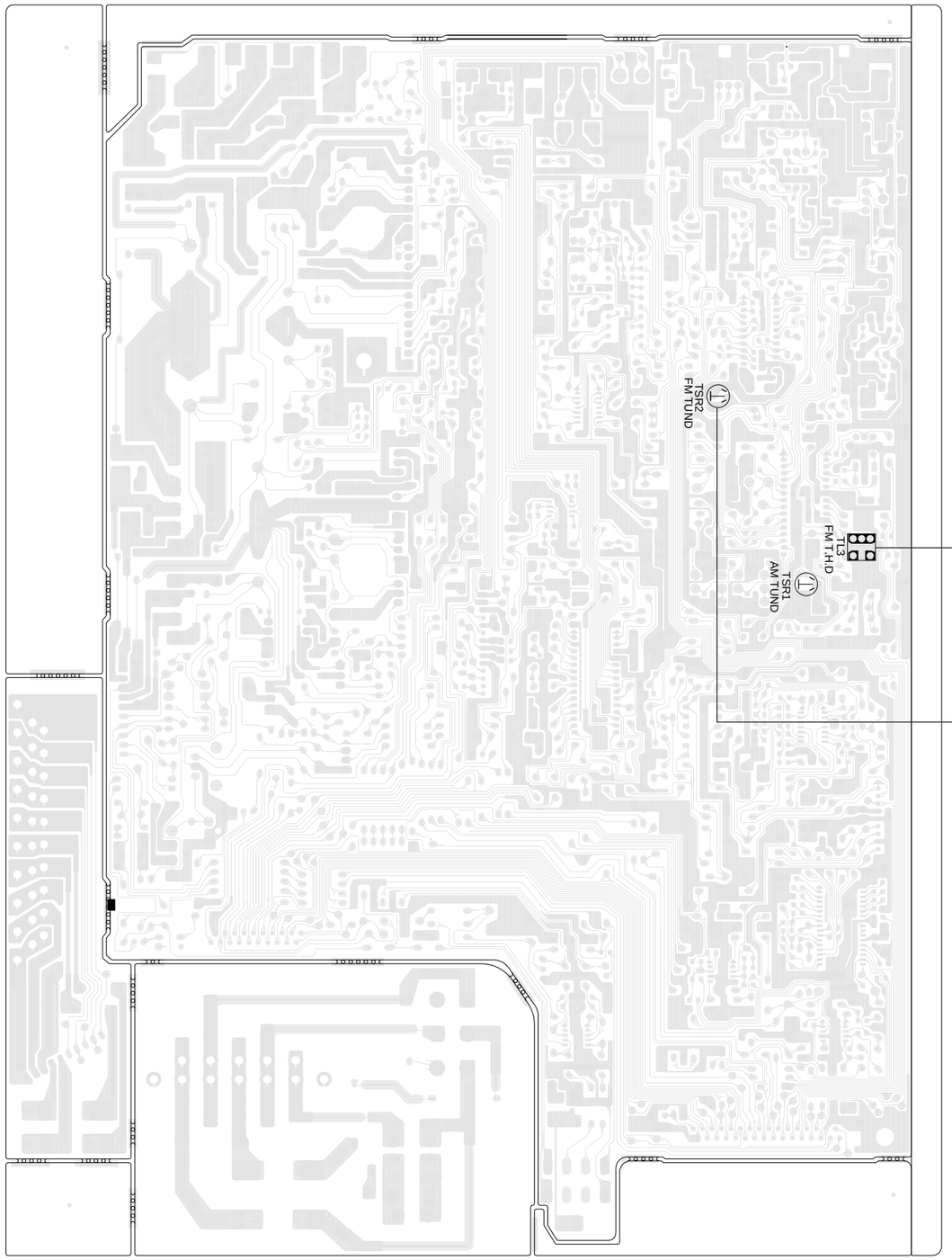


Figure 3-9

4. Alignment and Adjustments

4-1 Tuner



FM THD Adjustment	
SSG FREQ.	98 MHz
Adjustment point (TL3)	FM DETECTOR COIL
Output	60 dB
Minumum Distortion (0.3% below) (Figure 4-1)	

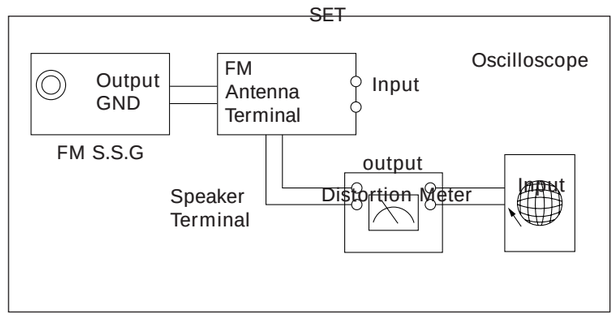


Figure4-1 IF CENTER and THD Adjustment

FM Search Level Adjustment	
SSG FREQ.	98 MHz
Adjustment point (TSR2)	BEACON SENSITIVITY SEMI-VR(5KΩ)
Output	450kHz
Adjust IVR1 so that “TUNED” of FLT is lighted (Figure 4-2)	

*Adjust FM S.S.G level to 23dB

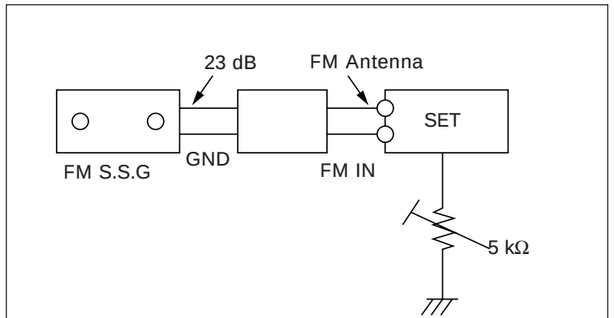


Figure4-2 FM Auto Search Level Adjustment

4-2 Cassette Deck

4-2-1 To Adjust Tape Speed

Notes

1) Measuring tape: i) MTT-111 (or equivalent)
(Tapes recorded with 3kHz)
ii) MTT-5512 (or equivalent)
2) Connect the cassette deck to the frequency counter as in figure 4-3.

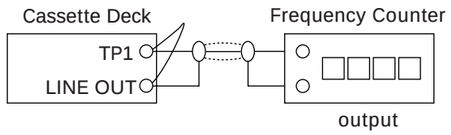


Figure 4-3

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	NOR SPEED Control	OUT (connected to the frequency counter)	1) Deck 1:MTT-111 2) Press PLAY SW button 3) Deck 2:Same as above	Turn JSR5 to left and right	3KHz	
2	HI SPEED Control	Same as above	1) Deck 1:MTT-111 2) Deck 2:MTT-5512 3) Press Hi Speed dubbing SW button	Turn JSR6 to left and right	6KHz	

4-2-2 To Adjust PlayBack Level

Notes

1) Before the actual adjustment, clean the play/recording head.
2) Measuring tape :
i) MTT-114NA(or equivalent 12.5kHz AZIMUTH control)
ii) MTT-150(or equivalent : Dolby level 200nwb/m)
3) Dolby NR SW OFF
4) The cassette deck is connections as shown in figure 4-5.

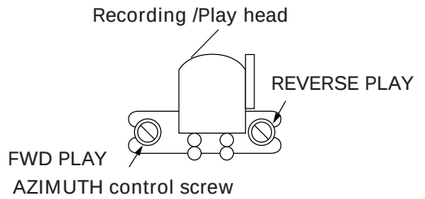


Figure 4-4

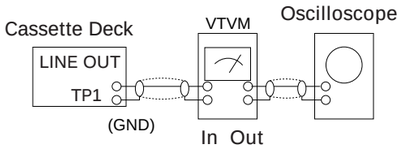


Figure 4-5

① Adjust Deck 1 Play Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP1 OUT (VTVM is connected to the scope)	After putting MTT-114NA into Deck 1 1) Press FWD PLAY button. 2) Press REV PLAY button.	1) Turn the control screw to as shown in Figure4-4. 2) Adjust the right control screw to playback REV. Mode	Max output and same phase (both channels)	After adjustment secure it with REGION LOCK.
2	PlayBack out Level	Same as above	PLAY MTT-150 on Deck 1.	L-CH:Turn JSR1L to the right and left R-CH:Turn JSR1R to the right and left	150mV	See the diagram for adjustment locations.

② Adjust Deck 2 Play Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP1 OUT (VTVM is connected to the scope)	After putting MTT-114NA into Deck 2 1)Press FWD PLAY button. 2)Press REV PLAY button.	1) Turn the control screw to as shown in Figure4-4. 2)Adjust the right control screw to playback REV. Mode	Max output and same phase (both channels)	After adjustment secure it with REGION LOCK.
2	PlayBack out Level	Same as above	PLAY MTT-150 on Deck 2.	L-CH:Turn JSR2L to the right and left R-CH:Turn JSR2R to the right and left	150mV	See the diagram for adjustment locations.

4-2-3 To Adjust Recording Level

NOTES

1) Connect the measuring instruments as shown in Figure 4-6.
2) Set the DOLBY NR Switch off.
3) Measuring tape:
   MTT-5512 (or equivalent: normal recording)
4) The input signals supply 400Hz 400mV into AUX IN of AMP (AUDIO OSC.)

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	Normal electric current for recording	Connect to TP2 as in Figure4-6 and read VTVM	Insert MTT-5512 into Deck2, then press REC button.	L-CH : JSR3L to the right and left. R-CH : JSR3R to the right and left	400 mV	See diagram for adjustment locations
2	BIAS Electric current	Connect to TP3 as in Figure 4-6 and read the VTVM	Insert MTT-5512 into Deck2, then press REC button.	L-CH: JSR4L and R-CH: JSR4R to the right and left	6 mV	See diagram for adjustment locations

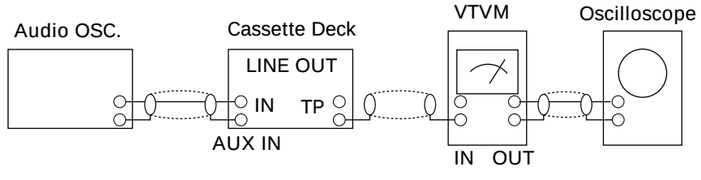
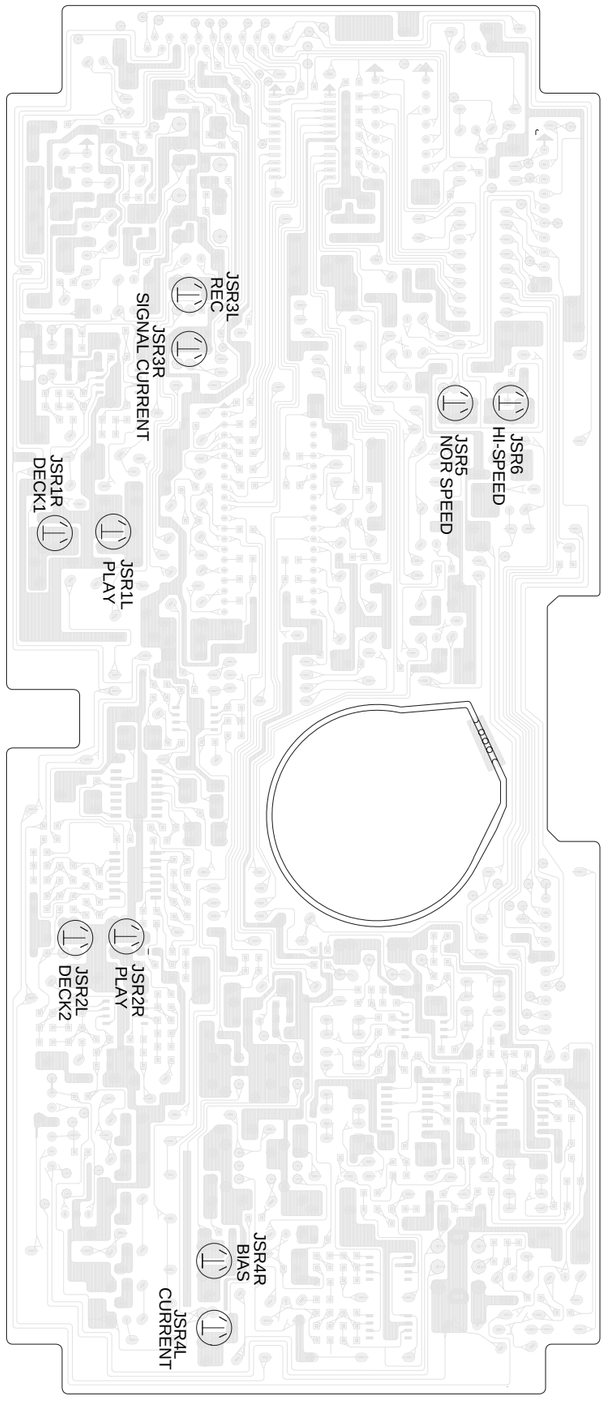


Figure 4-6

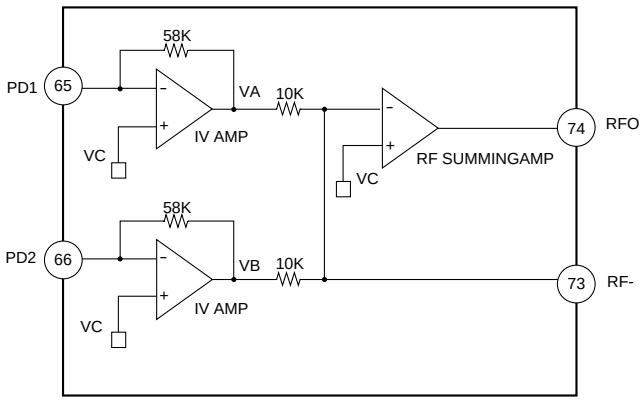


5. Special Circuit Descriptions

5-1 RF Amp Block

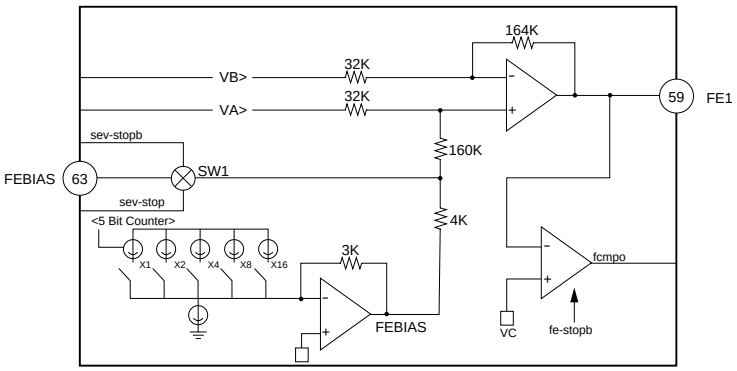
5-1-1 RF Amplifier

The two currents from input pins PD1 (A+C) and PD2 (B+D) are converted into voltages through I/V Amp, and they are added to RF summing Amp. The photo diode (A+B+C+D) signal which is I-V changed is outputted by RFO (pin74). At this pin, the eye pattern can be checked.



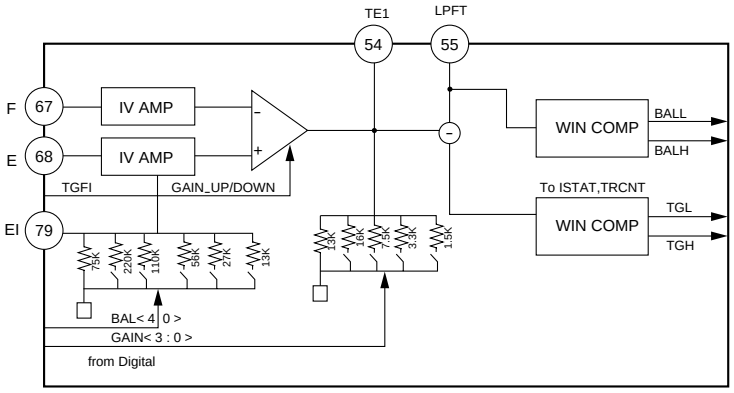
5-1-2 Focus Error Amp

The output of the focus error amp is the difference between RF I-V AMP(1) output Va and RF I-V AMP(2) output Vb,just is the Photo Diode ((A+C) - (B+D)) signal which is I-V changed.
The focus error bias voltage applied to the (+) of focus error amp can be changed by D/A converter as shown in diagram, so that the offset of focus error amp can be adjust automatical.
Focus error bias can be adjusted from the range of +100mV ~ -100mV by connectiong the resistor with pin 63 (FEBIAS).



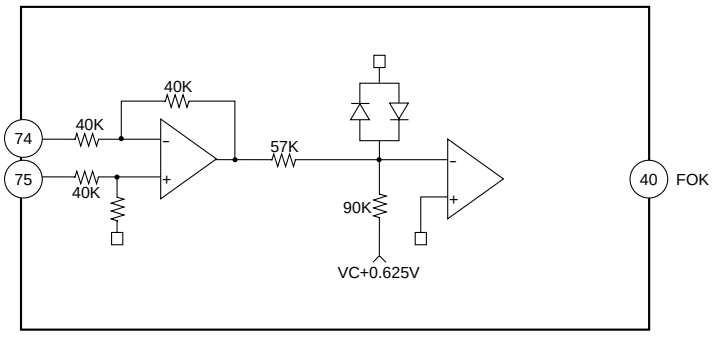
5-1-3 Tracking Error Amp

The current signals from the side spot photo diode (E and F) are input to the E and F pin and converted into voltage signals by E I-V and F I-V AMP. The output of tracking error amp is due to the difference between E I-V AMP voltage output.
The E-F balance can be adjusted by modifying the gain of E I-V AMP, and the tracking gain(Pin TE1) can be adjusted automatically by micom program.



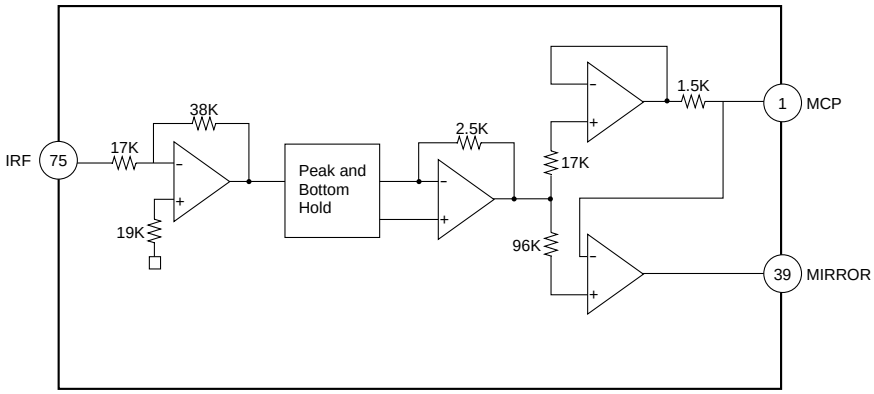
5-1-4 Focus OK Circuit

Extracting the DC part of RFI and RFO and comparing with the basic DC level, if RF Level is more than basic level, the FOK is output. The focus OK circuit generates a timing window of focus on to monitor the focus search status of focus serve.



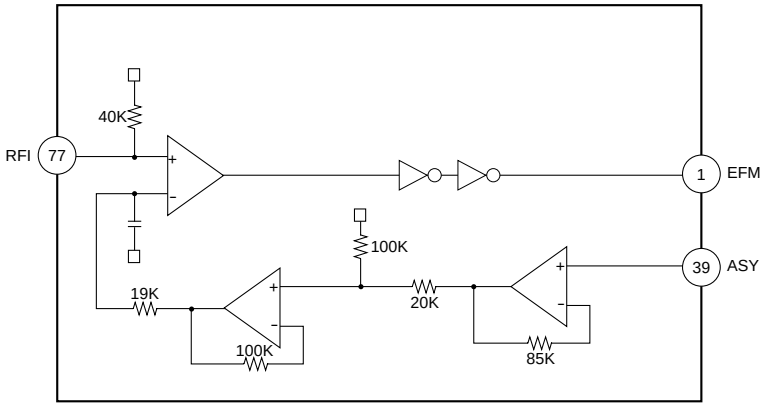
5-1-5 Mirror Circuit

After RFI signal is amplified by mirror amp, mirror signal is held in peak and bottom circuit. The following of 100KHZ traverse is possible in peak hold circuit and the loss of track count due to defect is counted in bottom hold circuit. Mirror output beyond 2KHz is. “L” at track on disc, “H” at interval between track on disc, “H” when the defect beyond 1.4ms is detected.
The time constant for the mirror hold must be sufficiently large than of the traverse signal



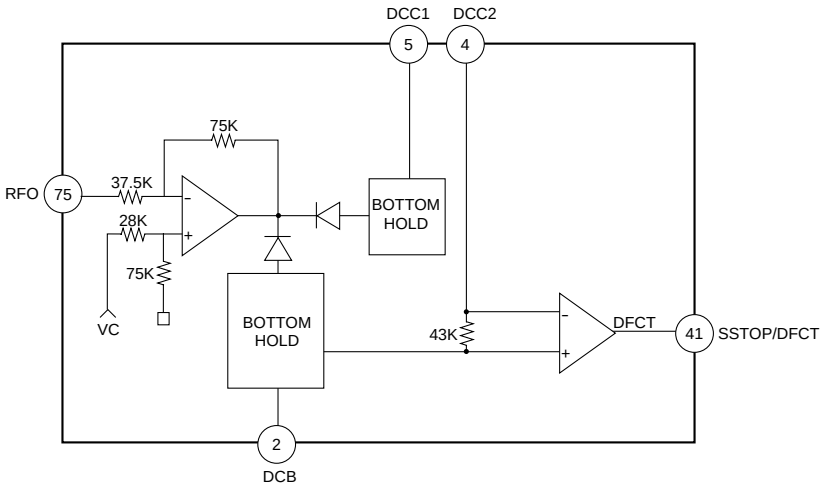
5-1-6 EFM Comparator

The EFM comparator converts a RF signal into a binary signal
As the asymmertry due to variations in disc manufacturing can not be eilminated by thr AC coupling alone, the reference voltage of EFM comparator is controlled utilizing the fact that the generation probability of 1,0 50% each in the binary EFM signals.



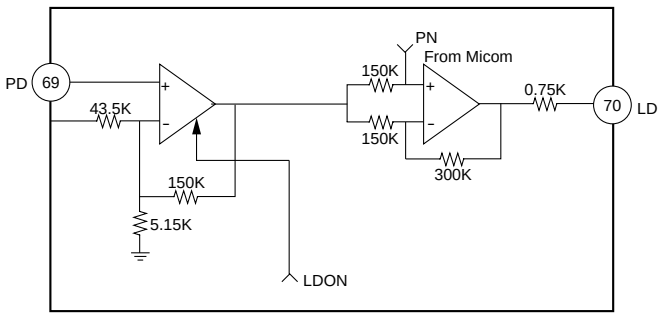
5-1-7 Defect Circuit

The RFO signal bottom, after being inverted, is held with two time constant of long and short. The short time-constant bottom hold is done for a disc mirror defect more than 0.1msec, the long time-constant bottom hold is done with the mirror level prior to the defect. By differentiating this with a capacitor coupling and shifting the level, both signals are compared to generate the mirror defect detection signal.



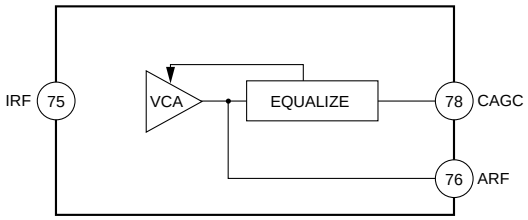
5-1-8 APC Circuit

As the laser diode has large negative temperature characteristic in its optical output when driven with a constant current on laser diode. Therefore, the output on processing monitor photo diode, must be a controlled current for getting regularly output power, thus the APC (Auto Power Control) circuit is composed.



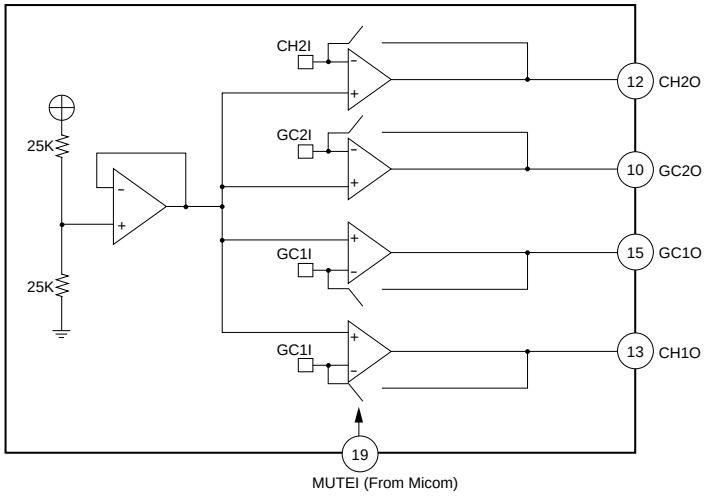
5-1-9 AGC Stability Circuit

The gain is adjusted by AGC Block with the function of maintainning the definite RF peak to peak level, after the operation of RF envelop detection and comparing with reference voltage.
RFO level is kept stable in 1Vp-p, and input to EFM Slice.



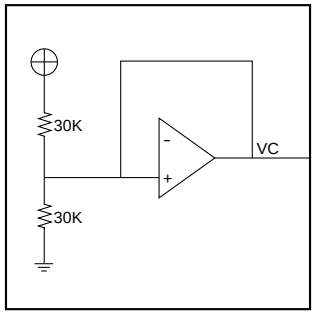
5-1-10 Post Filter

The adjustment of audio output gain and the integration of possible de-emphasis output are executed by the low pass filter. If the control by MUTE signal from micom exist, and when input signal absent, two channel of right and left is builted in.



5-1-11 Center Voltage Generation Circuit

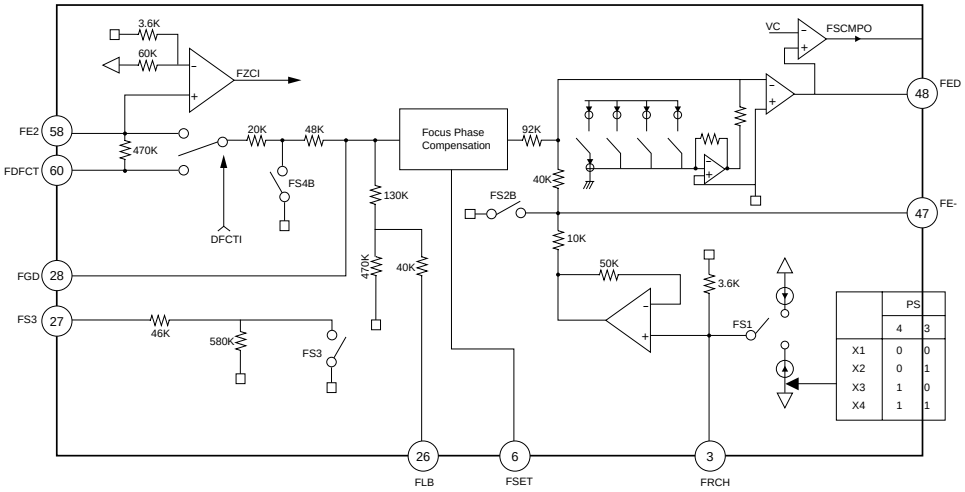
The Center Voltage is generated by using resistor dividing voltage.



5-2 Servo Block

5-2-1 Focus Servo Block

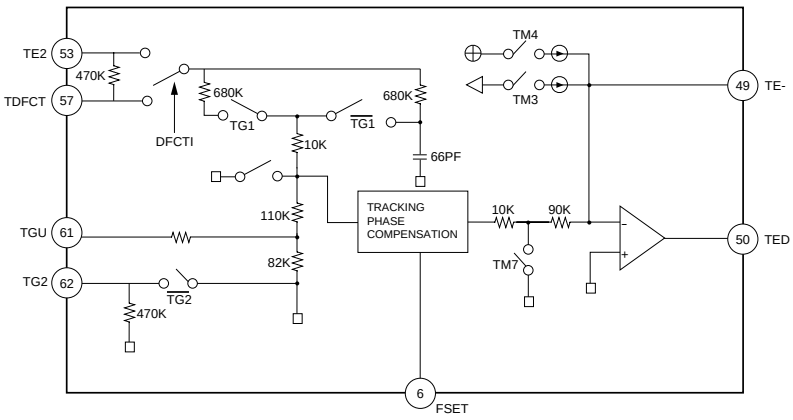
When defect="H (the defect signal is detected), the focus servo loop is muting in case of focus phase compensation. At this time, the focus error signal is outputted through the low pass filter formed by connecting a capacitor(0.1μF) and a built-in 470KΩ resistor to the FDFCT pin (pin60). Accordingly, the focus error output is held as the error value just before defect error during defect occuring. The peak frequency of focus loop phase compensation is at about 1.2KHz when the resistor connected to FSET pin(pin6) is 510kΩ, and it is inversely proportional to the resistor connected to the FSET pin. While the focus search is operating, the FS4 switch is on and then focus error signal is isolated, accordingly the focus search signal is output by FEO pin(pin48). When the FS2 switch is on(focus on), the focus servo loop is on and the focus error signal from FE2 pin(pin58) is outputted through the focus servo loop.



5-2-2 Tracking Servo Block

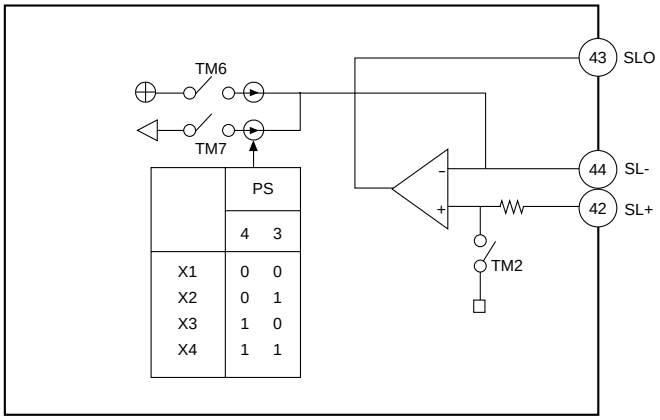
During detection of defect, the tracking error signal is output through the tracking servo loop after through the low pass filter formed by connecting a capacitor(0.1μF) and a built-in 470KΩ resistor to the TDFCT pin(pin57) in case of tracking phase compensation. The value of tracking gain up/down can be controlled by TGU and TG2 pin. The peak frequency of tracking loop phase compensation, the dynamic range and offset of op amp can be adjusted by changing the value of resistor connected to FSET pin same as focus loop. In case of unstable status of actuator after jumping, the ON/OFF of tracking loop is controlled by TM7 switch of break circuit.

After 10-track jumping, servo circuit gets out of the liner range and actuator,s tracking is unstable occasionally. Accordingly, unnecessary jumping with many tracking error should be prevented.



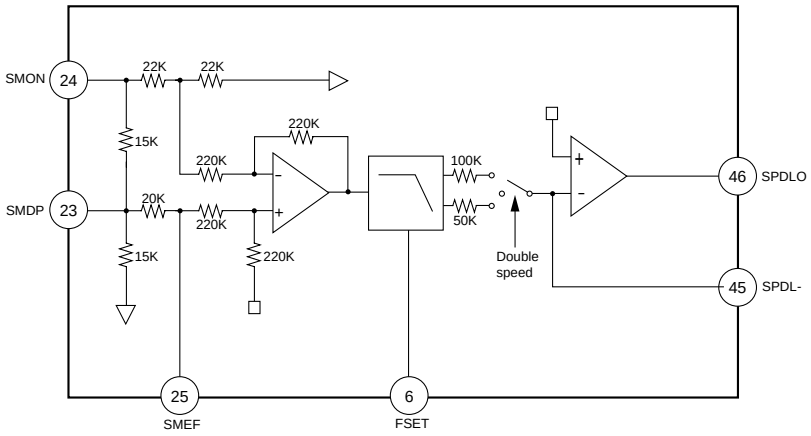
5-2-3 Sled Servo Block

The moving of pick-up is controlled by tracking servo output through low pass filter.
The sled kick voltage is output for track jump operation.



5-2-4 Spindle Servo Block

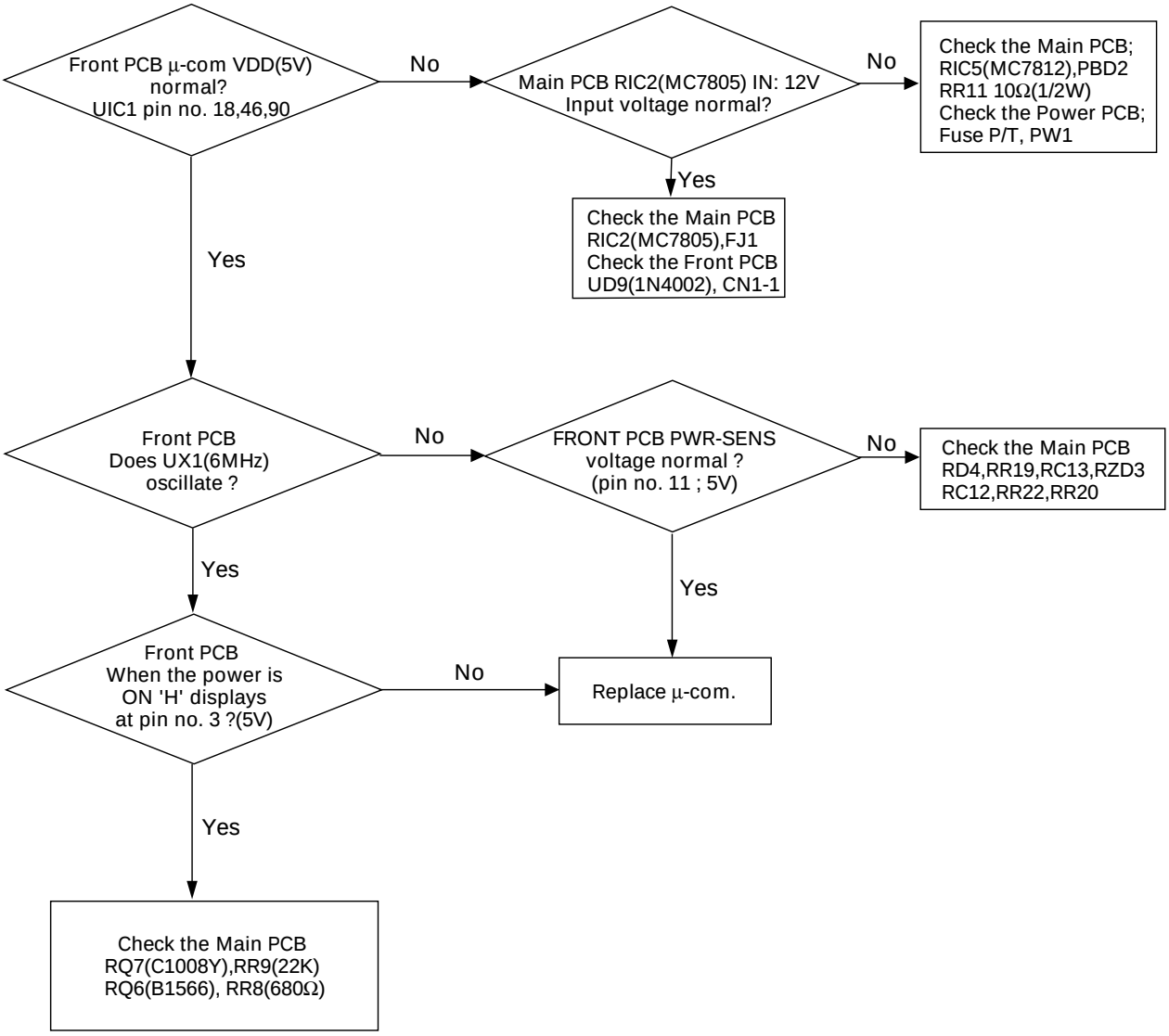
The 20KΩ resistor and 0.33μF capacitor form the 200Hz low pass filter, and the carrier component of spindle servo error signals is eliminated. In CLV-S mode, SMEF becomes "L" and pin 25 low pass filter fc lowers, strenthening the filter further. The characteristics of high frequency phase compensation in focus tracking servo and the characteristics of cut off frequecny in CLV low pass filter are test by FSET pin.



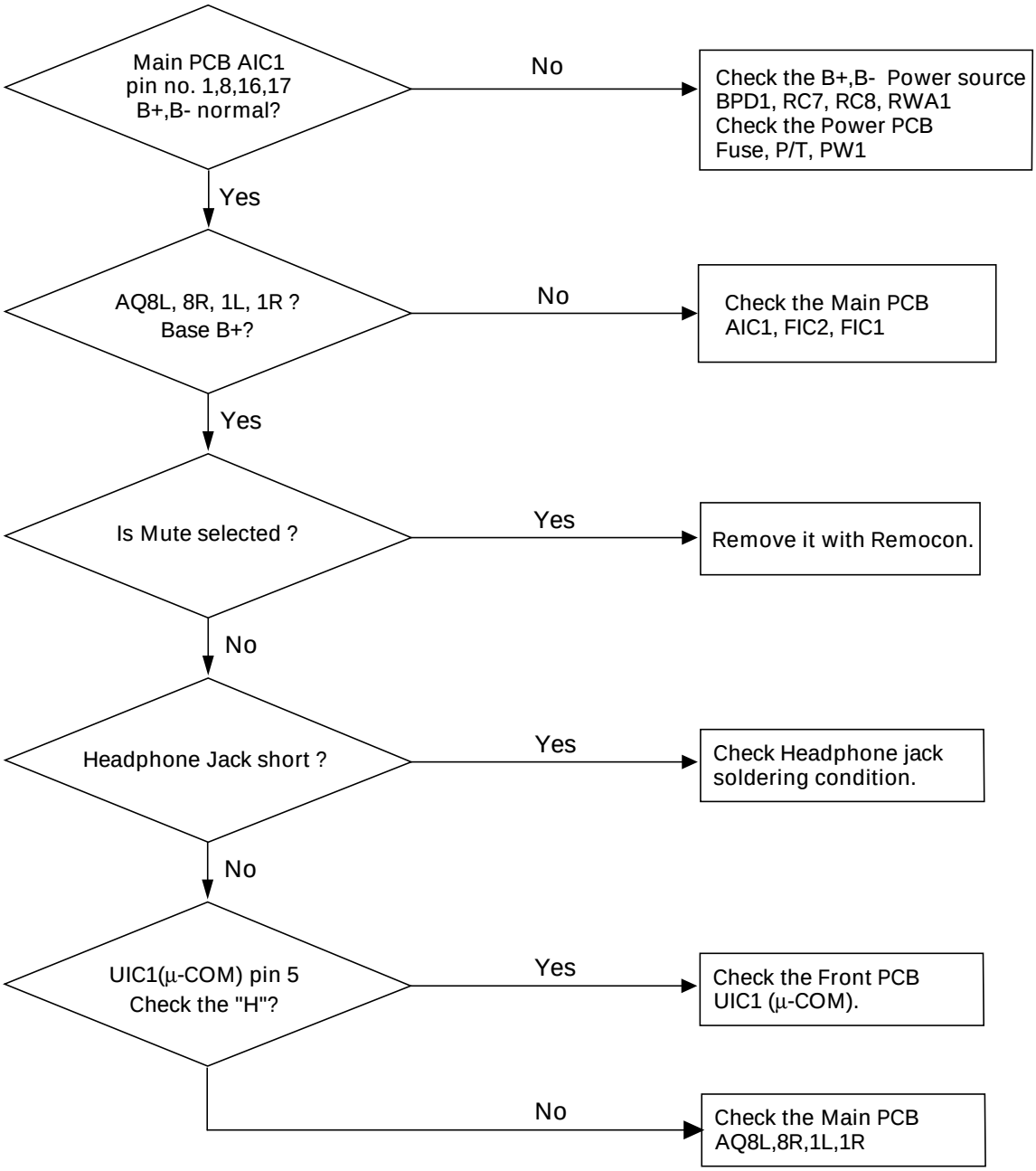
6. Troubleshooting

6-1 Amplifier

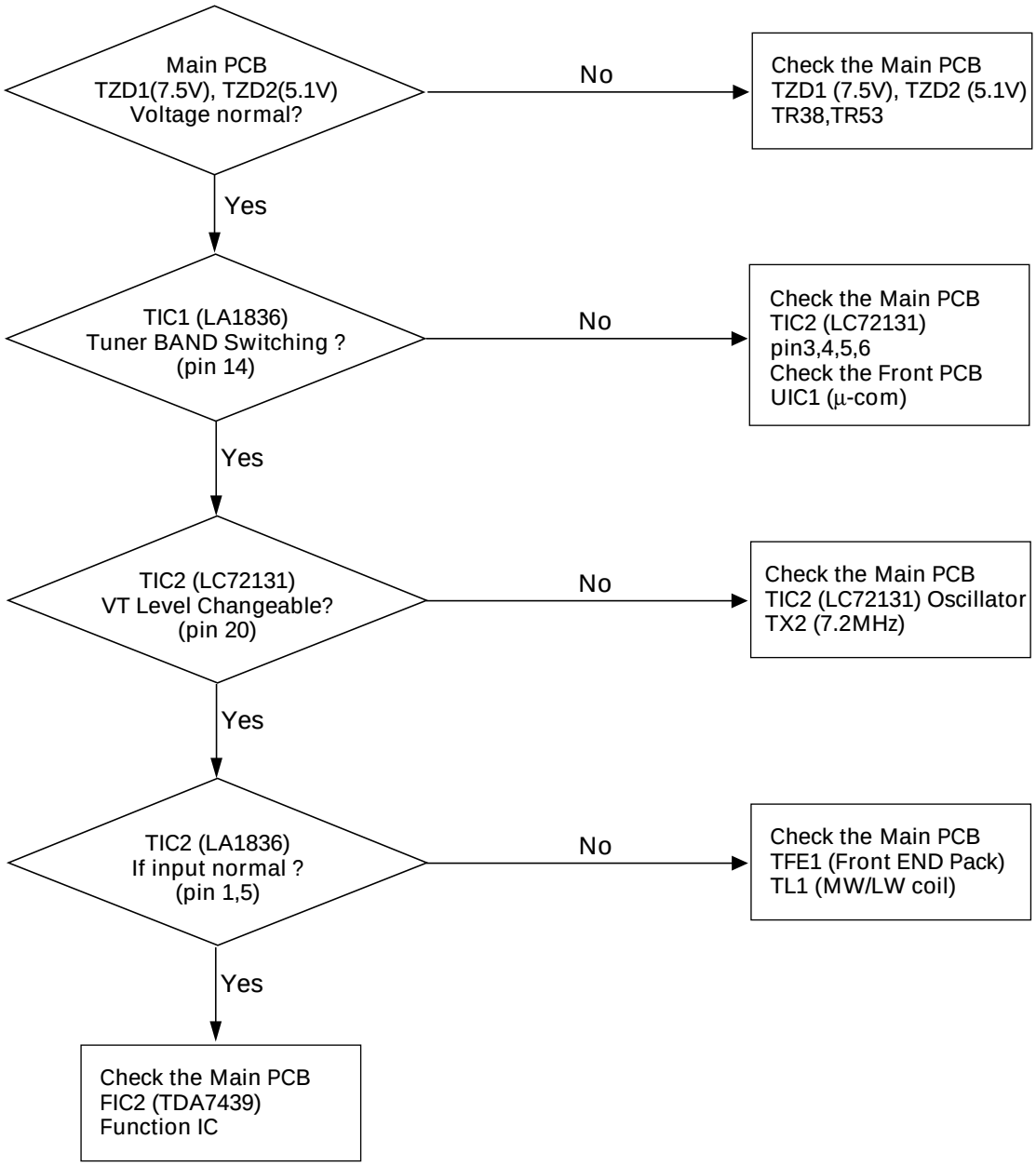
6-1-1 Power Malfunction


Front PCB μ-com VDD(5V) normal? UIC1 pin no. 18,46,90
No
Main PCB RIC2(MC7805) IN: 12V Input voltage normal?
No
Check the Main PCB; RIC5(MC7812),PBD2 RR11 10Ω(1/2W) Check the Power PCB; Fuse P/T, PW1
Yes
Check the Main PCB RIC2(MC7805),FJ1 Check the Front PCB UD9(1N4002), CN1-1
Yes
Front PCB Does UX1(6MHz) oscillate ?
No
FRONT PCB PWR-SENS voltage normal ? (pin no. 11 ; 5V)
No
Check the Main PCB RD4,RR19,RC13,RZD3 RC12,RR22,RR20
Yes
Yes
Front PCB When the power is ON 'H' displays at pin no. 3 ?(5V)
No
Replace μ-com.
Yes
Check the Main PCB RQ7(C1008Y),RR9(22K) RQ6(B1566), RR8(680Ω)

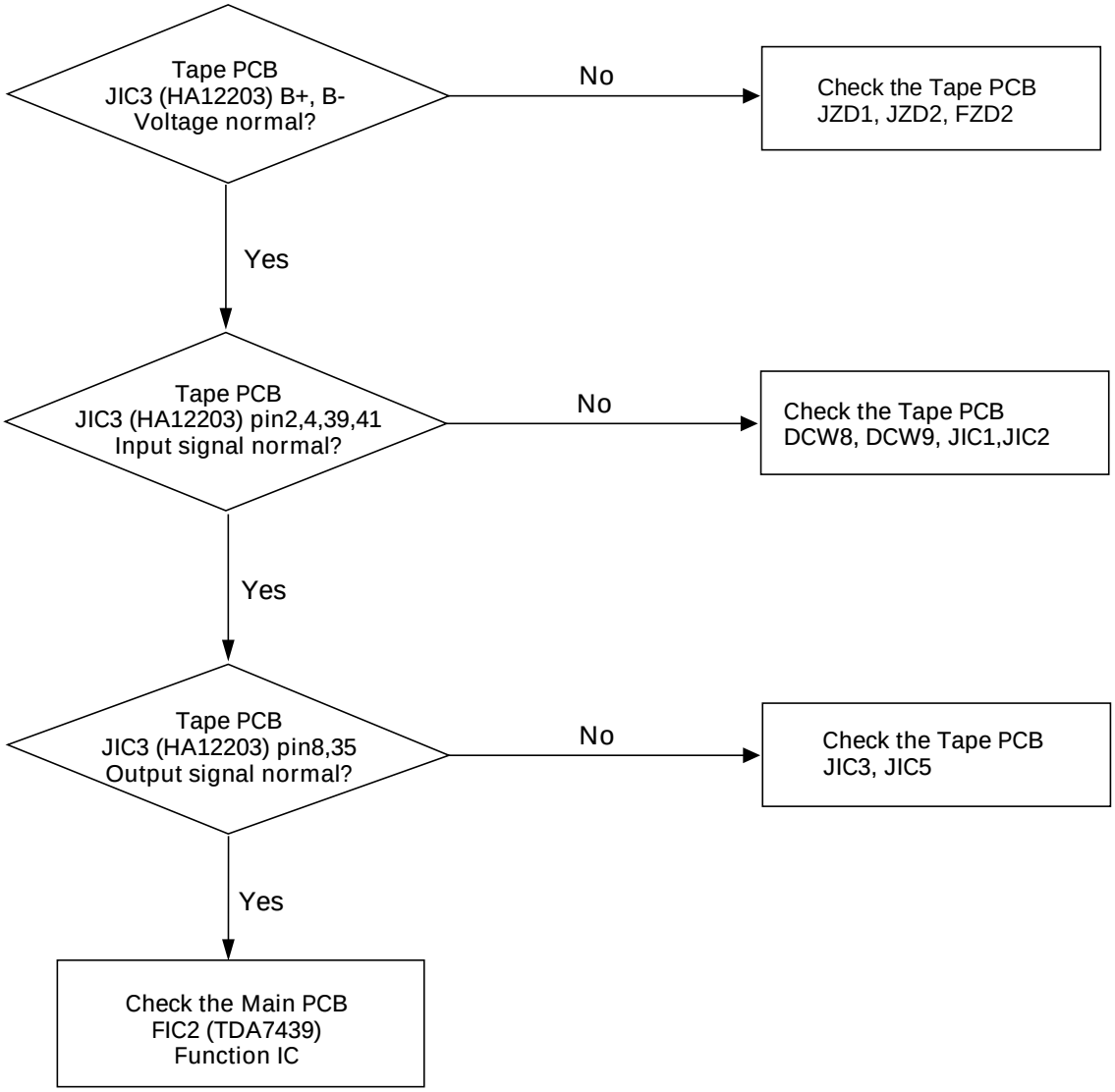
6-1-2 No Output



6-1-3 Tuner Malfunction(FM/AM)

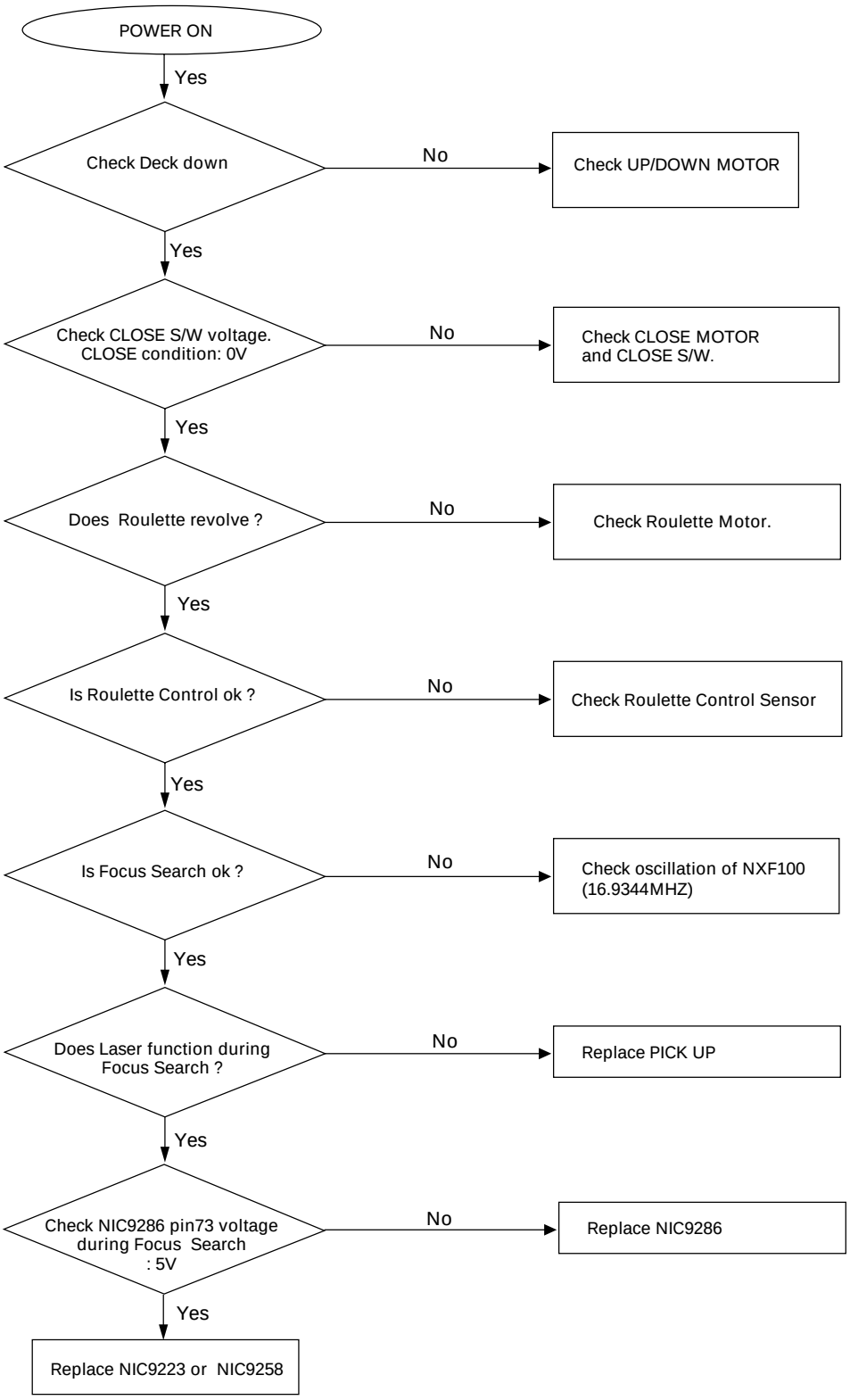


6-1-4 Tape

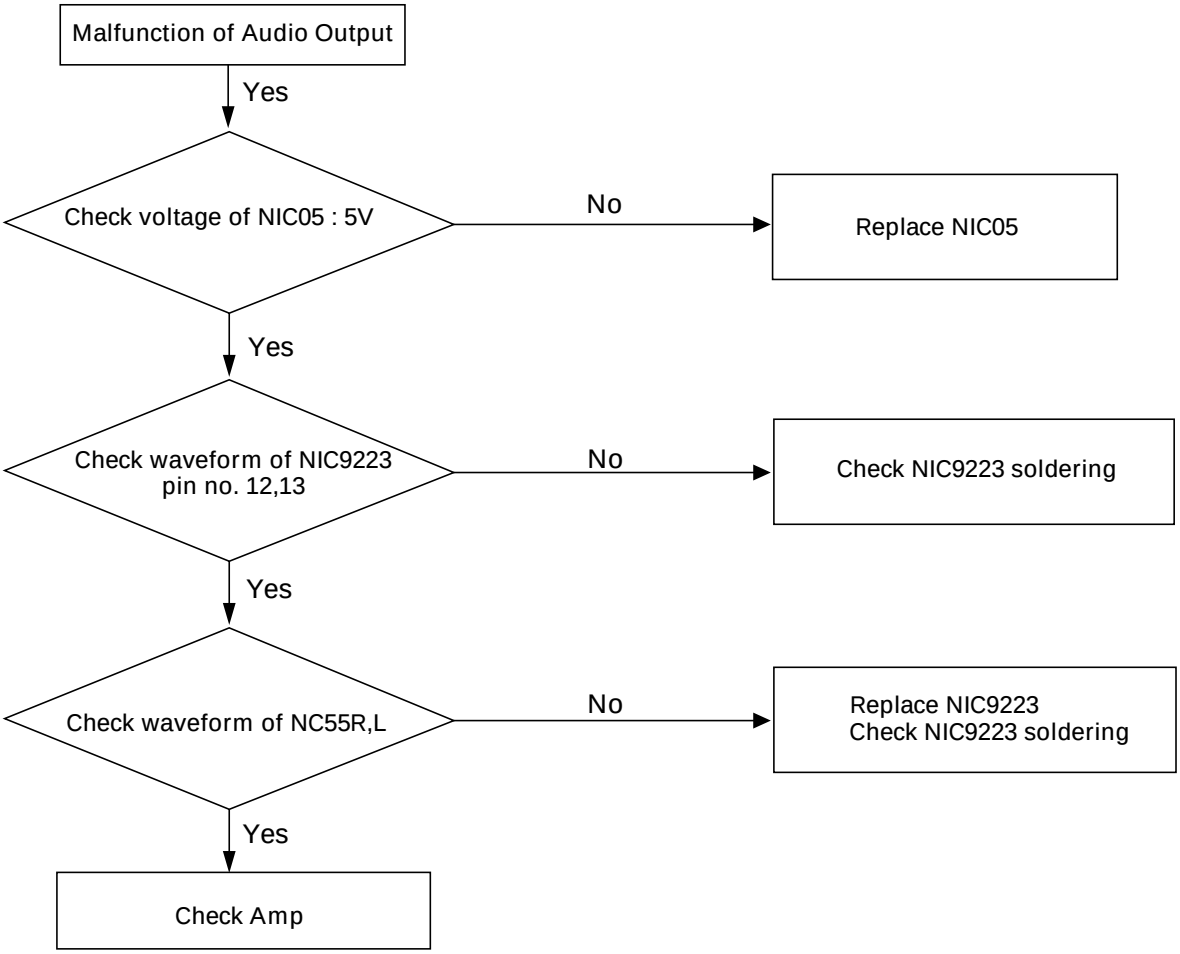

Tape PCB
JIC3 (HA12203) B+, B-
Voltage normal?
No
Check the Tape PCB
JZD1, JZD2, FZD2
Yes
Tape PCB
JIC3 (HA12203) pin2,4,39,41
Input signal normal?
No
Check the Tape PCB
DCW8, DCW9, JIC1,JIC2
Yes
Tape PCB
JIC3 (HA12203) pin8,35
Output signal normal?
No
Check the Tape PCB
JIC3, JIC5
Yes
Check the Main PCB
FIC2 (TDA7439)
Function IC

6-3 CD

6-3-1 Revolution Malfunction

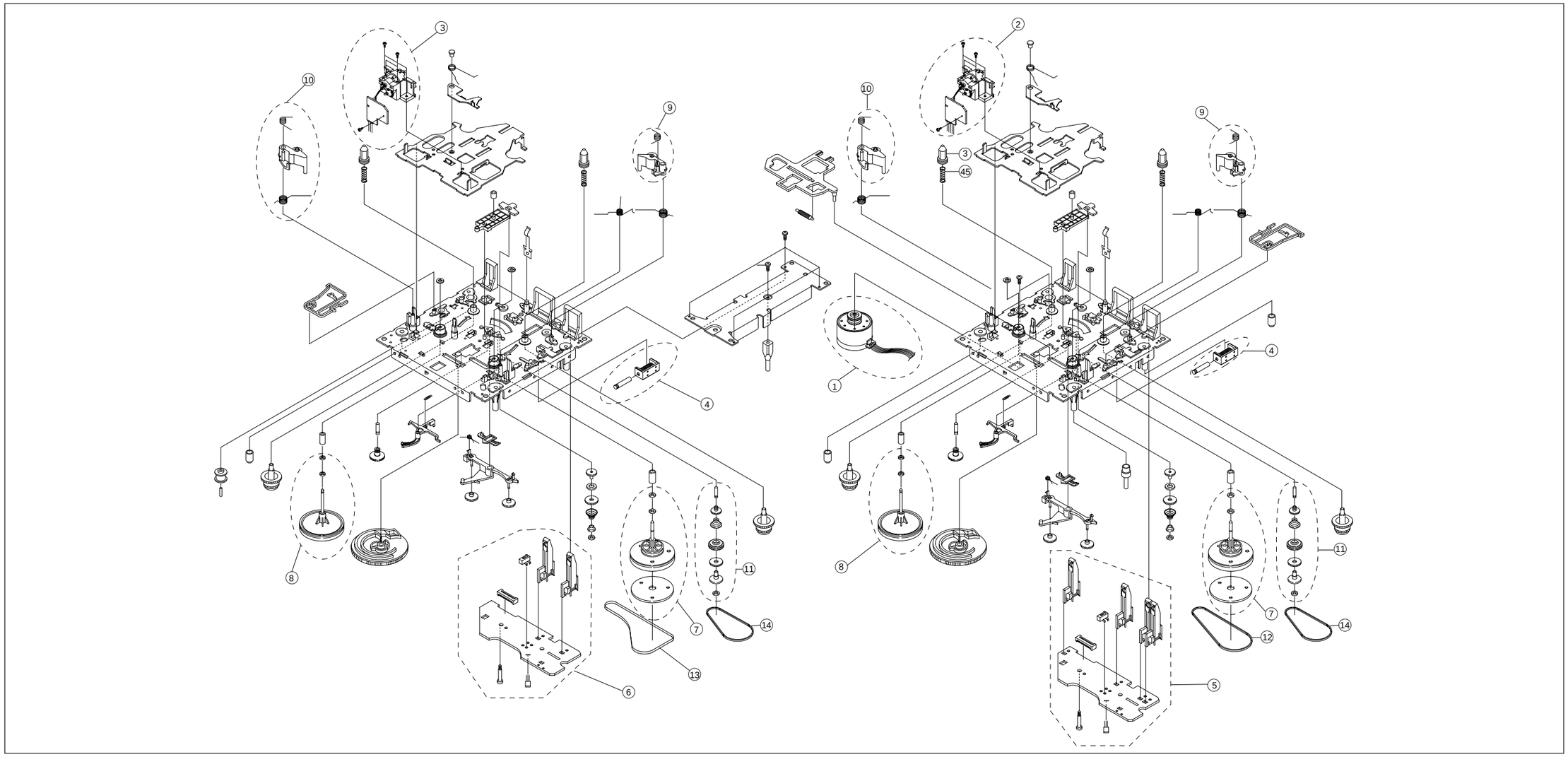


6-2-2 Audio Output Malfunction



7.Exploded Views and Parts List

7-1 Cassette Deck Exploded View and Parts List

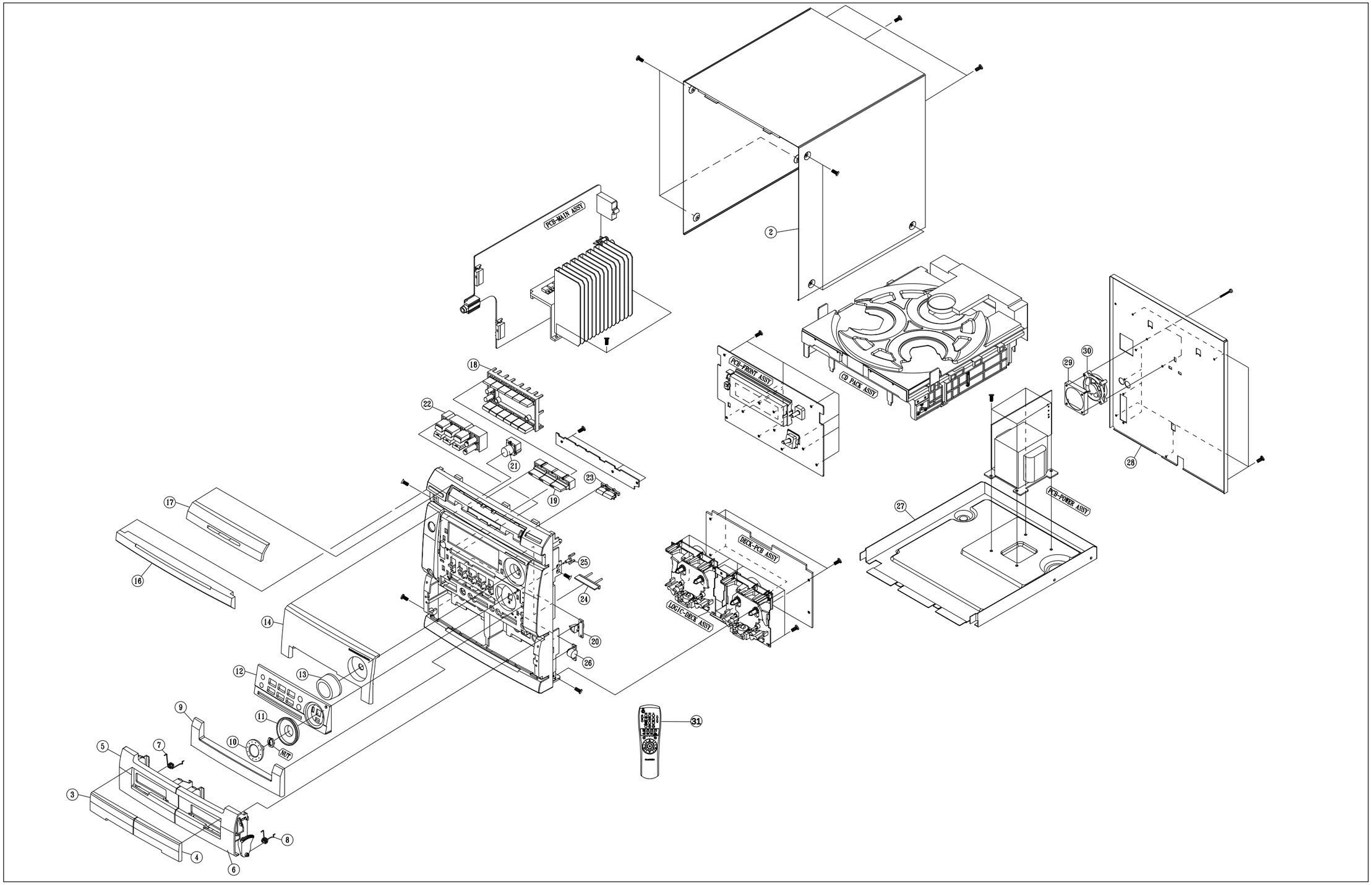


No.	Code No.	Description	Specification	Remarks
	AH59-20004U	DECK-CASSETTE	ADR2118TW	
1	AH81-11052G	MOTOR ASS'Y	EG530YD2BH	
2	AH81-11052D	HEAD ASS'Y (R/P)	YK56RAA4N3	
3	AH81-10798D	HEAD ASS'Y (P/B)	YK50PBB4N3	
4	AH81-10798E	SOLENOID ASS'Y	ADR2100-01	
5	AH81-11052E	CNTR ASS'Y (R/P)	ADR2118TW-03	
6	AH81-11052B	CNTR ASS'Y (P/B)	ADR2118TW-04	
7	AH81-10798H	FLYWHEEL ASS'Y (F)	ADR2100-04	

No.	Code No.	Description	Specification	Remarks
8	AH81-10798J	FLYWHEEL ASS'Y (R)	ADR2100-05	
9	AH81-10798K	PINCH ARM (F)	ADR2100-06	
10	AH81-10798M	PINCH ARM (R)	ADR2100-07	
11	AH81-10798N	CLUTCH ASS'Y	ADR2100-08	
12	AH81-11052A	MAIN BELT (R/P)	ADR2118TW-01	
13	AH81-11052E	MAIN BELT (P/B)	ADR2118TW-02	
14	AH81-10798U	SUB BELT	ADR2100-09	

7-2 Main Exploded View and Parts List

7-2-1 Exploded View



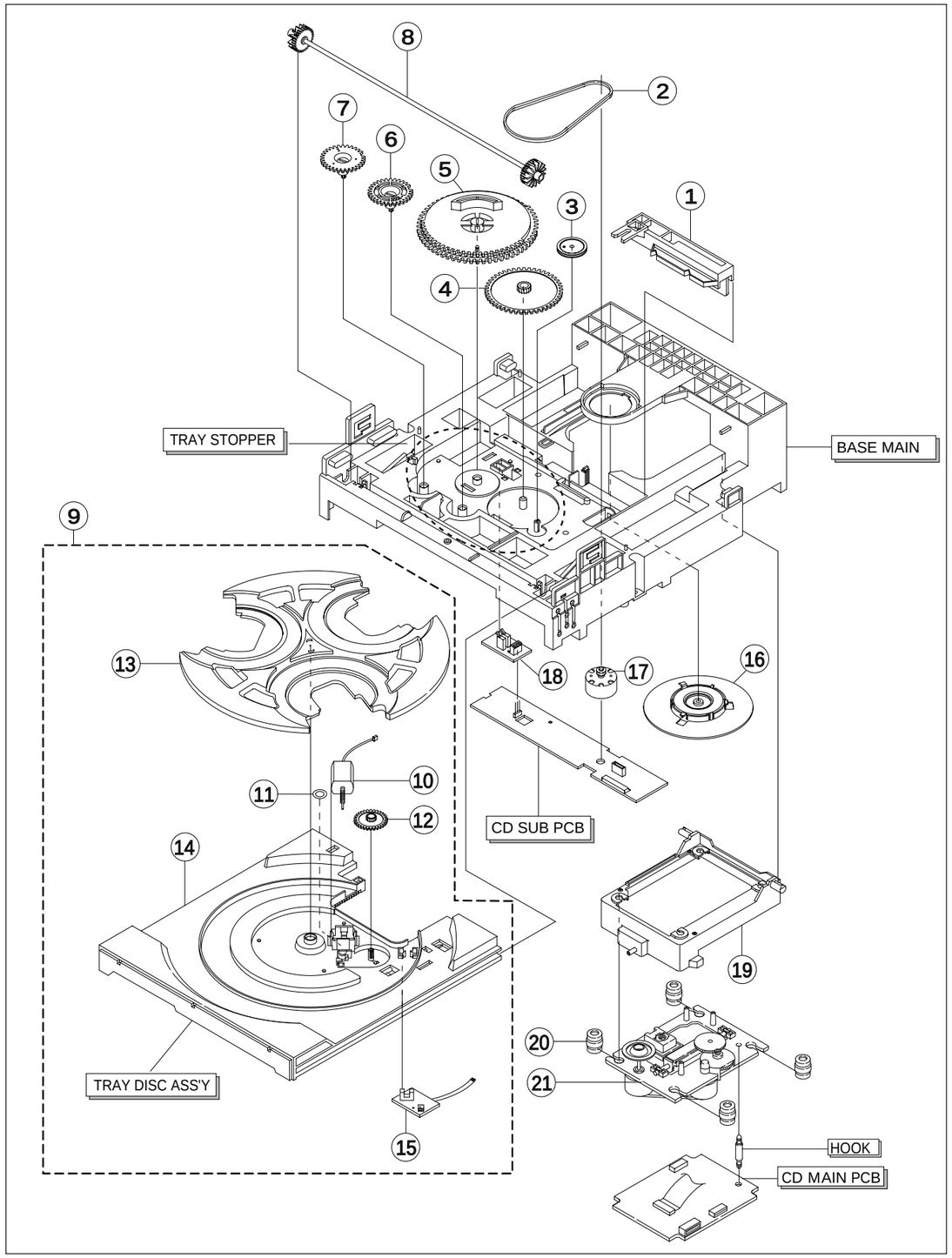
7-2-2 Parts List (using MAX-850)

No.	Code No.	Description	Specification	Remarks
2	AH64-30390A	CABINET-TOP	PCM 0.625T (D/GRAY)	
3	AH64-40438A	WINDOW-DOOR,A	PMMA VIOLET(LUCKY, 71129)	
4	AH64-40439A	WINDOW-DOOR,B	PMMA VIOLET(LUCKY, 71129)	
5	AH64-50338C	DOOR-CASS,A	ABS 94HB BLK	
6	AH64-50339C	DOOR-CASS,B	ABS 94HB BLK	
7	AH61-62004A	SPRING-EJECT,A	STS Ø1.1	
8	AH61-62005A	SPRING-EJECT,B	STS Ø1.1	
9	AH61-20484B	CAP-FRONT,E	ABS 94HB BLK	
10	AH64-11222C	KNOB-JOG	HF-06660I,G6430	
11	AH64-40440B	DECO-JOG	ABS NATURAL HF-0660I,G3174	
12	AH64-40433C	DECO-FRONT	ABS 94HB BLK	
13	AH64-11221C	KNOB-VOLUME	HF-0660I,G3174	
14	AH64-40436B	WINDOW-VFD	PMMA VIOLET(DSP/EQ)	
	AH64-40436D	“	PMMA VIOLET(EQ)	
15	AH67-40028A	FILTER-VFD	PC 0.3T BLK	
16	AH64-50340D	DOOR-CD	ABS 94HB BLK(LUCKY,41802)	
17	AH64-40435B	WINDOW-CD	PMMA VIOLET	
18	AH64-11236B	KNOB-DEMO	HF-0660I, G3174	
19	AH64-11225B	KNOB-DISC	HF-0660I, G3174	
20	AH95-50001A	LATCH-ASSY	MAX-555	
21	AH64-11230C	KNOB-POWER	HF-0660I, G3174	
22	AH64-11226C	KNOB-FUNCTION	HF-0660I, G3174	
23	AH64-11224C	KNOB-CD OPEN	HF-0660I, G3174	
24	AH67-10166A	LENS-COM	ACRYL +	
25	AH67-10168A	LENS-JOG	ACRYL +	
26	AH61-80030A	DAMPER-ASSY	HF-0660I, G3174	
27	AH64-30390A	CABINET-BOTTOM	SECC 1.0T	
28	AH64-30417D	CABINET-REAR	SECC 0.8T SILK :BLK	
	AH64-30417E	“	“	
	AH64-30417F	“	“	
	AH64-30417J	“	“	
29	AH61-10747A	BRACKT-FAN	SECC 1.0T	
30	AH31-10020A	FAN-DC	D0620B-12M, 12VDC/0.16A	
31	AH59-10120A	REMOCON-ASSY	-,-,BU2478-2Z,32	

7-2-2 Parts List (using MAX-860)

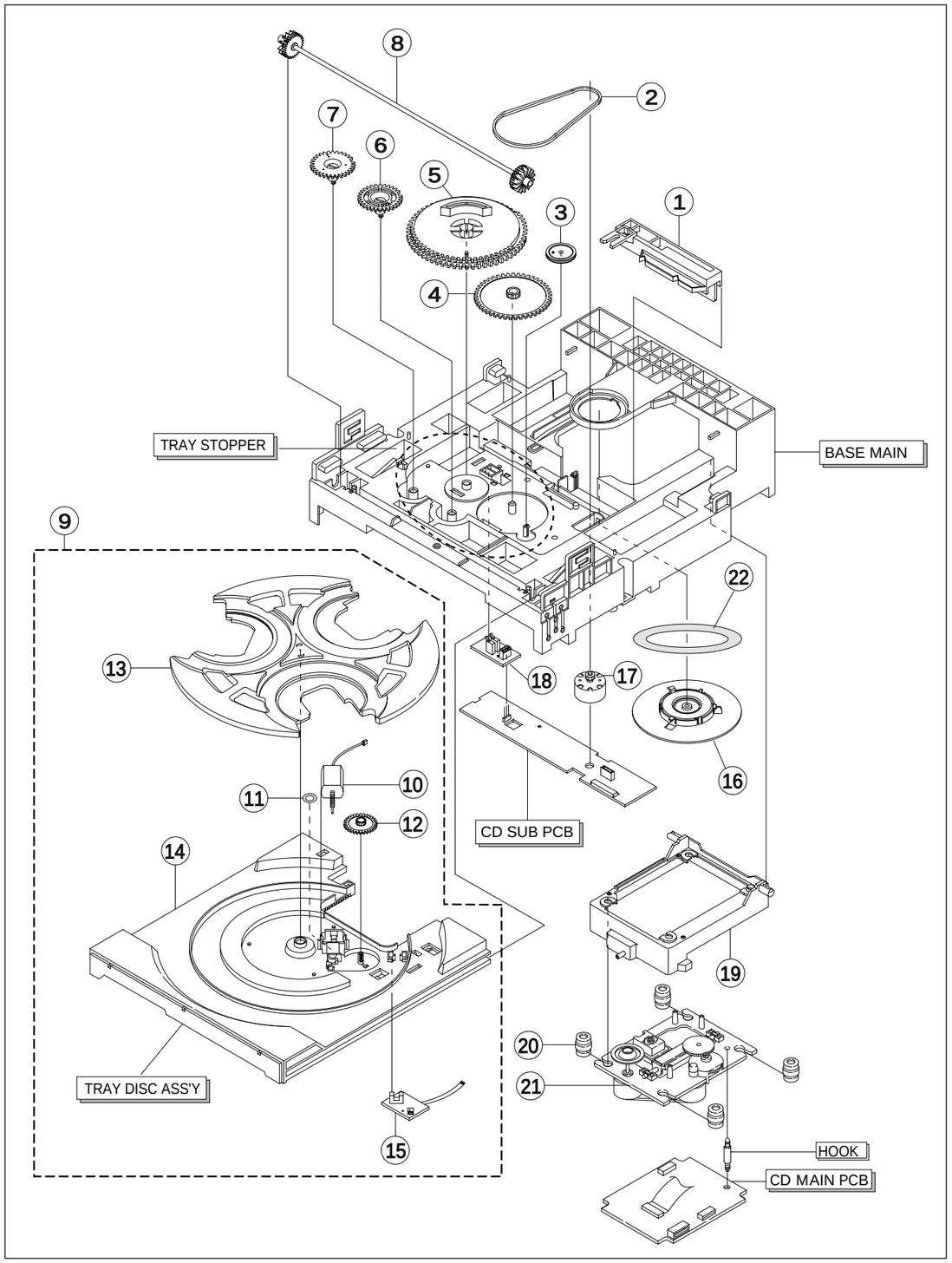
No.	Code No.	Description	Specification	Remarks
2	AH64-30390A	CABINET-TOP	PCM 0.625T (D/GRAY)	
3	AH64-40438A	WINDOW-DOOR,A	PMMA VIOLET(LUCKY, 71129)	
4	AH64-40439A	WINDOW-DOOR,B	PMMA VIOLET(LUCKY, 71129)	
5	AH64-50338C	DOOR-CASS,A	ABS 94HB BLK	
6	AH64-50339C	DOOR-CASS,B	ABS 94HB BLK	
7	AH61-62004A	SPRING-EJECT,A	STS Ø1.1	
8	AH61-62005A	SPRING-EJECT,B	STS Ø1.1	
9	AH61-20484B	CAP-FRONT,E	ABS 94HB BLK	
10	AH64-11222C	KNOB-JOG	HF-06660I,G6430	
11	AH64-40440B	DECO-JOG	ABS NATURAL HF-0660I,G3174	
12	AH64-40433C	DECO-FRONT	ABS 94HB BLK	
13	AH64-11221C	KNOB-VOLUME	HF-0660I,G3174	
14	AH64-40436B	WINDOW-VFD	PMMA VIOLET(DSP/EQ)	
	AH64-40436D	“	PMMA VIOLET(EQ)	
15	AH67-40028A	FILTER-VFD	PC 0.3T BLK	
16	AH64-50340K	DOOR-CD	ABS 94HB BLK(LUCKY,41802)	
17	AH64-40435B	WINDOW-CD	PMMA VIOLET	
18	AH64-11236B	KNOB-DECO	HF-0660I, G3174	
19	AH64-11225B	KNOB-DISC	HF-0660I, G3174	
20	AH95-50001A	LATCH-ASSY	MAX-555	
21	AH64-11230C	KNOB-POWER	HF-0660I, G3174	
22	AH64-11226C	KNOB-FUNCTION	HF-0660I, G3174	
23	AH64-11224C	KNOB-CD OPEN	HF-0660I, G3174	
24	AH67-10166A	LENS-COM	ACRYL +	
25	AH67-10168A	LENS-JOG	ACRYL +	
26	AH61-80030A	DAMPER-ASSY	HF-0660I, G3174	
27	AH64-30390A	CABINET-BOTTOM	SECC 1.0T	
28	AH64-30417D	CABINET-REAR	SECC 0.8T SILK :BLK	
	AH64-30417E	“	“	
	AH64-30417F	“	“	
	AH64-30417J	“	“	
29	AH61-10747A	BRACKT-FAN	SECC 1.0T	
30	AH31-10020A	FAN-DC	D0620B-12M, 12VDC/0.16A	
31	AH59-10120A	REMOCON-ASSY	-,-,BU2478-2Z,32	

7-3 CD Mecha Exploded View and Parts List



No.	Code No.	Description	Specification	Remarks
1	AH66-80022A	SLIDER-CAM	ABS HF-380 NTR	
2	AH66-60034A	BELT-LOAD	CR	
3	AH66-20186A	GEAR-PULLEY	POM(M90-44) WHT	
4	AH66-20187A	GEAR-LOAD	POM(M90-44) BLK	
5	AH66-20188A	GEAR-CAM	POM(M90-44) WHT	
6	AH66-20189A	GEAR-TRAY	POM(M90-44) BLK	
7	AH66-20190A	GEAR-CONVERT	POM(M90-44) WHT	
8	AH66-20191A	GEAR-SYNCRO	ABS HF-380 NTR	
9	AH59-10097A	ASSY-TRAY DISC	CMS-300, ASS'Y-TRAY	
10	AH59-10098A	ASS-WORM-MOTOR	CMS-300, ASS'Y-WORM	
11	AH69-20044A	CUSHION-MOTOR	NBR BLK	
12	AH66-20193A	GEAR-ROULETTE	POM(M90-44) BLK	
13	AH66-90056A	TRAY-ROULETTE	ABS XR-401 BLK	
14	AH66-90055A	TRAY-DISC	-,ABS,-,BLK	
15	AH59-10099A	ASSY-PCB SENSOR	CMS-300,ASS'Y SENSOR	
16	AH59-10100A	ASSY-TABLE CHUCK	CMS-300,ASS'Y CHUCK	
17	AH59-10101A	ASSY-PULLEY-MOTOR	CMS-300,ASS'Y CHUCK	
19	AH66-30086A	LEVER-LIFTER	ABS HF-380 BLK	
20	AH73-10016A	RUBBER-CD	IRR	
21	AJ59-20003F	DECK-CDP	DECK-CD *CMS-A30NM6	

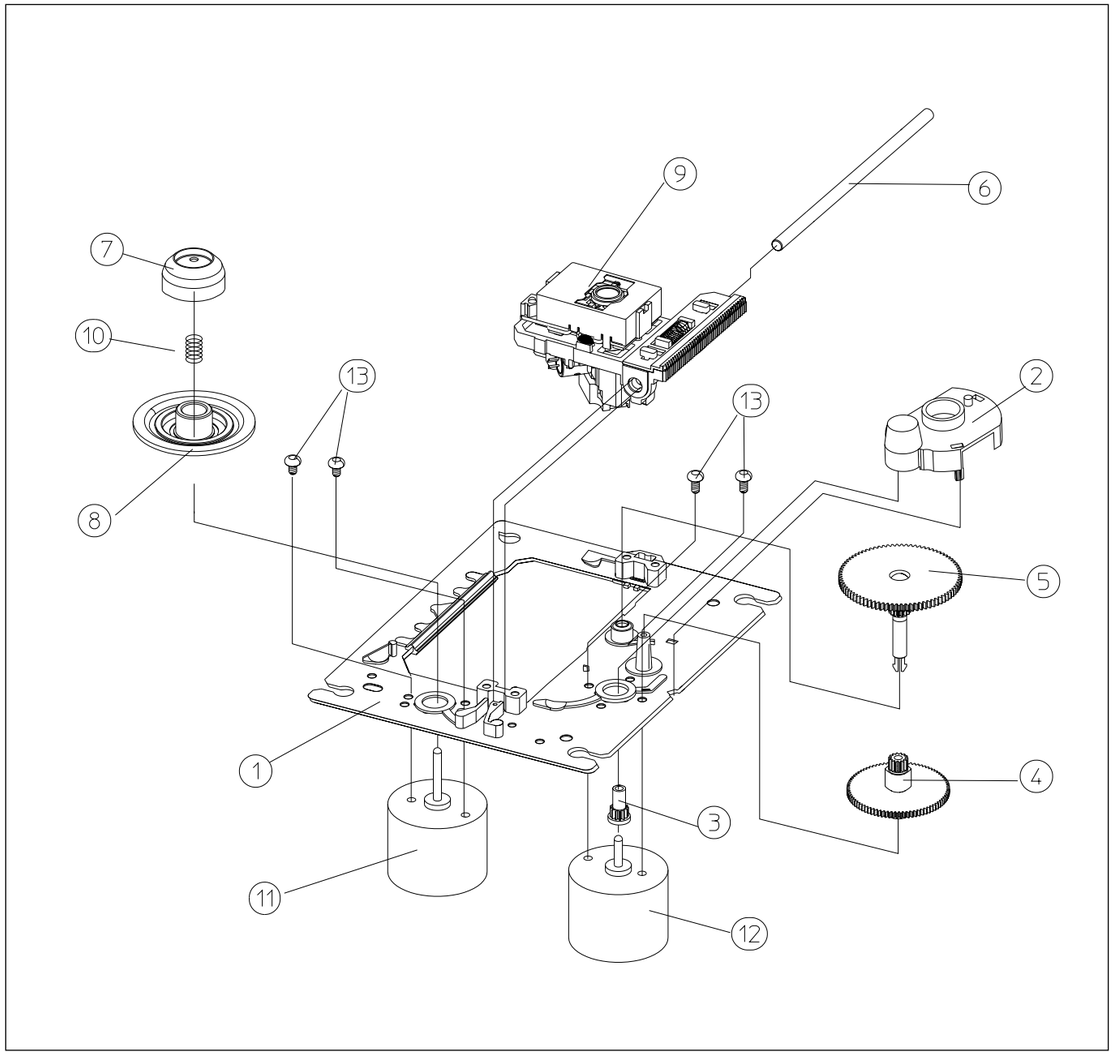
7-3 CD Mecha Exploded View and Parts List (Option)



No.	Code No.	Description	Specification	Remarks
1	AH66-80022A	SLIDER-CAM	ABS HF-380 NTR	
2	AH66-60034A	BELT-LOAD	CR	
3	AH66-20186A	GEAR-PULLEY	POM(M90-44) WHT	
4	AH66-20187A	GEAR-LOAD	POM(M90-44) BLK	
5	AH66-20188A	GEAR-CAM	POM(M90-44) WHT	
6	AH66-20189A	GEAR-TRAY	POM(M90-44) BLK	
7	AH66-20190A	GEAR-CONVERT	POM(M90-44) WHT	
8	AH66-20191A	GEAR-SYNCRO	ABS HF-380 NTR	
9	AH59-10097A	ASSY-TRAY DISC	CMS-300, ASS'Y-TRAY	
10	AH59-10098A	ASS-WORM-MOTOR	CMS-300, ASS'Y-WORM	
11	AH69-20044A	CUSHION-MOTOR	NBR BLK	
12	AH66-20193A	GEAR-ROULETTE	POM(M90-44) BLK	
13	AH66-90056A	TRAY-ROULETTE	ABS XR-401 BLK	
14	AH66-90055A	TRAY-DISC	-,ABS,-,BLK	
15	AH59-10099A	ASSY-PCB SENSOR	CMS-300,ASS'Y SENSOR	
16	AH59-10100B	ASSY-TABLE CHUCK	CMS-300UD,TABLE-CHUCK ASSY	
17	AH59-10101A	ASSY-PULLEY-MOTOR	CMS-300,ASS'Y CHUCK	
19	AH66-30086A	LEVER-LIFTER	ABS HF-380 BLK	
20	AH73-10016A	RUBBER-CD	IRR	
21	AH59-20004Y	DECK-CDP	CMS-P30AM6UD	
22	AH63-70141A	SHEET-CHUCK	PVC 1.0	

7-4 CD Deck Exploded View and Parts List

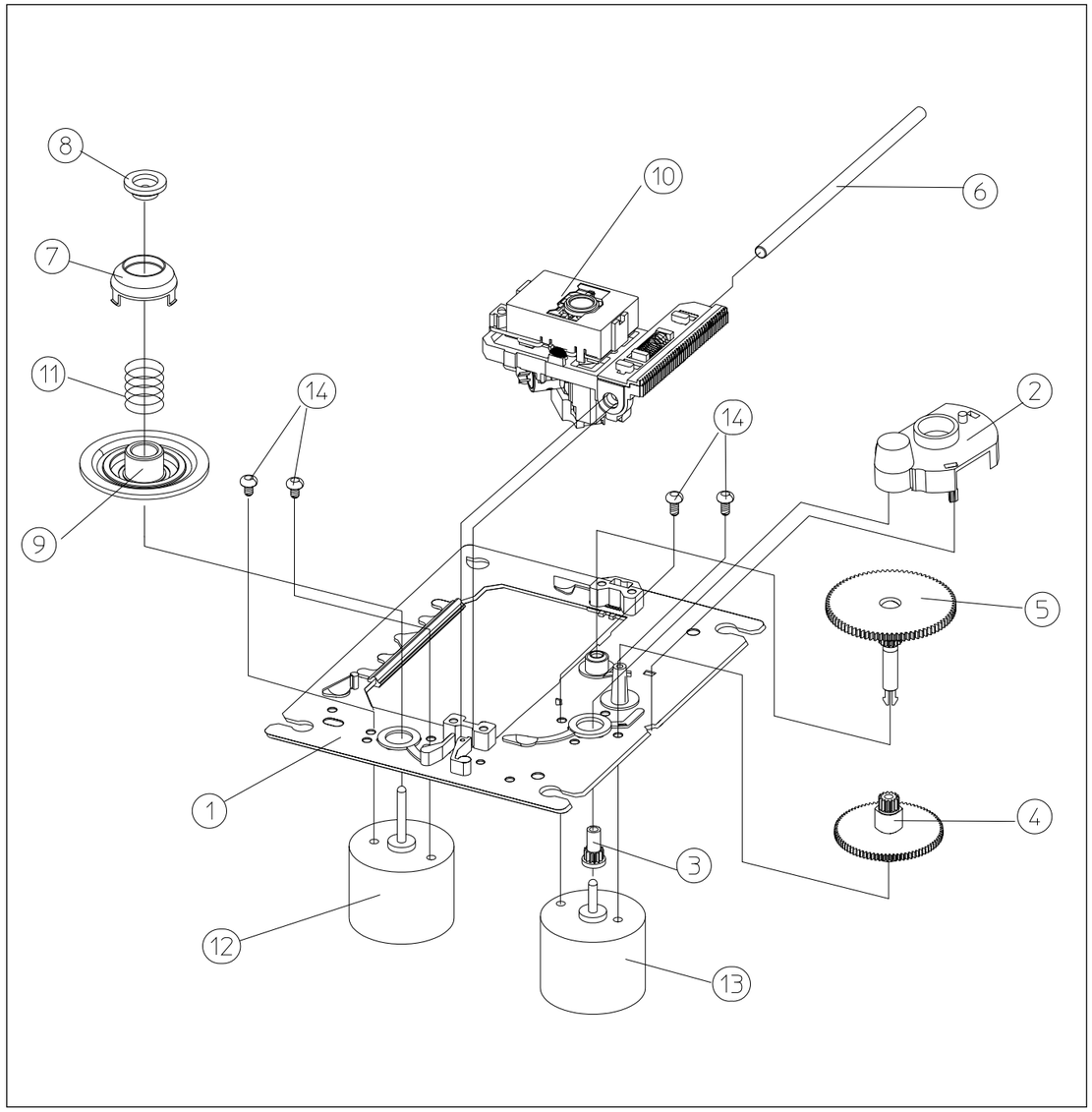
7-4-1 Exploded View



7-4-2 Parts List

No.	Code No.	Description	Specification	Remarks
	AJ59-20003F	DECK-CD	CMS-P30NM6	
1	AH61-10022C	CHASSIS-DECK(M)	CMSA30 POM M90-44	
2	AH63-30048A	COVER-GEAR	CMS-V30 BLK ABS	
3	AH66-20016A	GEAR(A)	CMS-V30 M0.3 Z13 SP POM	
4	AH66-20017A	GEAR(B)	CMS-V30 M0.3 Z13 SP POM	
5	AH66-20018A	GEAR(C)	CMS-V30 M0.3 Z16/Z90 SP POM	
6	AH71-50036A	SHAFT-PU	CMS-V30 D3 L79 SUS420J2	
7	15253-503-011	CENTER-RING	ABS+GS 20% CMS-V10N	
8	AH66-90018A	TURN-TABLE(M)	ABS+GS 20% CMS-V10N	
9	AJ30-20001B	PICK-UP CDP	P/U SOH-A1 ROW V-P/J	
10	AH61-60055A	SPRING-T/TABLE	CS STS-W PI0.4 D5.7 L9.3 CMS-V10N	
11	AH31-10009A	MOTOR-SPINDLE	RF-310T-11400 43L 25V 85mA	
12	AH31-10002B	MOTOR-FEED	RF-310ta 30MM NDM4RA3ETL 11.0MM	
13	AH60-10014A	SCREW-PH(+M2*3)	+M2X3 FE FZY W700	

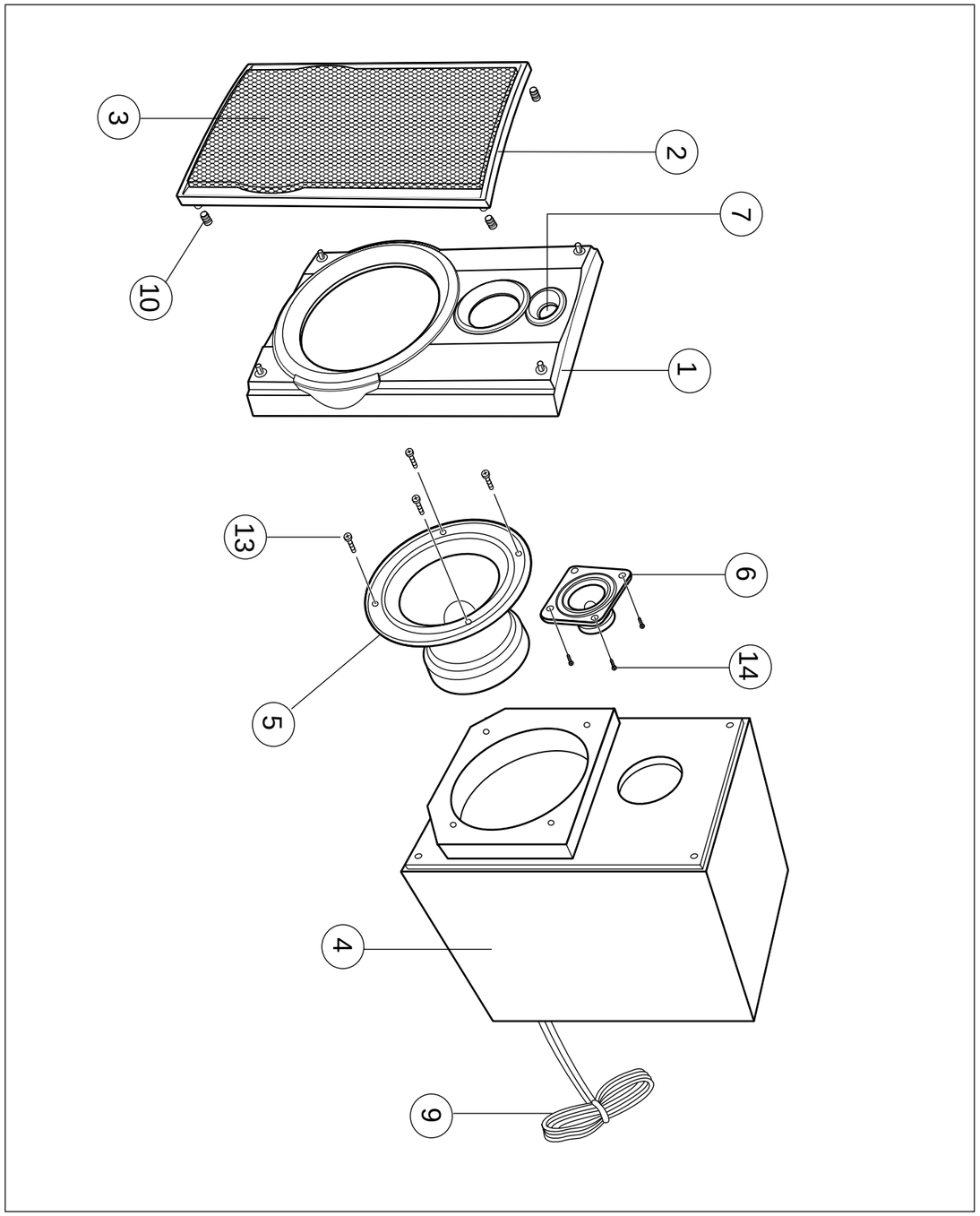
7-4 CD Deck Exploded View and Parts List (Option)



No.	Code No.	Description	Specification	Remarks
	AH59-20004Y	DECK-CD	CMS-P30AM6UD	
1	AH61-10022B	CHASSIS-DECK(M)	CMSP30 POM M90-44	
2	AH63-30048A	COVER-GEAR	CMS-V30 BLK ABS	
3	AH66-20016A	GEAR(A)	CMS-V30 M0.3 Z13 SP POM	
4	AH66-20017A	GEAR(B)	CMS-V30 M0.3 Z13 SP POM	
5	AH66-20018A	GEAR(C)	CMS-V30 M0.3 Z16/Z90 SP POM	
6	AH71-50036A	SHAFT-PU	CMS-V30 D3 L79 SUS 420J2	
7	15253-503-011	CENTER-RING	ABS+GS 20% CMS-V10N	
8	AH64-10648A	CENTER-KNOB	ABS 94HB	
9	AH66-90029A	TURN-TABLE(M)	-,-,-,CMS-V30	
10	AJ30-20001B	PICK-UP CDP	P/U SOH-A1 ROW V-P/J	
11	AH61-60055A	SPRING-T/TABLE	CS STS-W PI0.4 D5.7 L9.3 CMS-V10N	
12	AH31-10009A	MOTOR-SPINDLE	RF-310T-11400 43L 25V 85mA	
13	AH31-10002B	MOTOR-FEED	RF-310TA 30MM NDM4RA3ETL 11.0MM	
14	AH60-10014A	SCREW-PH(+M2*3)	+M2X3 FE FZY W700	

7-5 Speaker System

7-5-1 Exploded View



7-5-2 Parts List

No.	Code No.	Description	Specification	Remarks
	AH59-90218A	SPEAKER-SYSTEM	PS860,EXPORT	
1	AH81-10978A	FRONT PANEL	205 X 315 X 42.5	
2	AH81-10978B	NET FRAME	185 X 308 X 10	
3	AH81-10978C	PUNCHING	185.6 X 297.6 X 4 X 0.5t	
4	AH81-10978D	CABINET	204 X 314 X 247	
5	AH81-10978E	WOOFER	SG16W50KFA	
6	AH81-11006W	TWEETER	SG05T38BFA	
7	AH81-10978F	PIEZO	ø 28mm	
8	AH81-11006E	BADGE	35mm SAMSUNG	
9	AH81-10978H	CORD ASS'Y	ø 0.18 X 20 X 2P X2.5mm	
10	AH81-10978J	NET HOLDER	ø 9 X ø8 X 10t	
11	AH81-10978K	DUCT	ø 50 X ø 56 X 135mm	
12	AH81-10978N	FOOT	ø 10 X 2t	
13	AH81-10978P	SCREW W/F	PWA, ø 3.5 x 12, BLK	
14	AH81-11006T	SCREW T/W	PWA, ø 3x 8, ZN	
15	AH81-10978Q	CAP HOLDER	ø 28,HIPS	

8. Electrical Parts List

Location no.	Code no.	Description & Specifiation	Remarks
	AH26-80142X	TRANS-POWER;EI85.8X57,115/230V,50/60Hz,M	
	AH39-10002N	POWER CORD;EP2,SPT-1#2/18,2.0M,5239,UL/C	
AH90-10738N	**ASSY-MAIN PCB;MAX870,DOM**	**S.N.A**	
AH93-10006G	**ASSY-MAIN,MANU;MAX870,MAIN MANU**	**S.N.A**	
AC4	2401-000375	C-AL;100UF,5%,100V,GP,TP,10X20,5MM	
AC5	2401-000375	C-AL;100UF,5%,100V,GP,TP,10X20,5MM	
AIC1	1201-001218	IC-POWER AMP;417,SIP,22P,-,DUAL,40DB,PLA	
AIC1	AH62-32001A	HEAT SINK-M;-,AL,-,T6,-,-,-,MAX853V	
AJ1	3716-000209	TERMINAL-BLOCK;,-,-,60V,7A	
AJ2	3711-000820	CONNECTOR-HEADER;BOX,2P,1R,2.5MM,STRAIGH	
BPF1L	AH26-10001A	TRANS-IF;FV-AD-BASE19K/38K,LOW PASS FILT	
BPF1R	AH26-10001A	TRANS-IF;FV-AD-BASE19K/38K,LOW PASS FILT	
DIC2	1205-000529	IC-SWITCH;LC4966,DIP,14P,-,-,40V,300MW,-	
DX1	2802-000158	RESONATOR-CERAMIC;4MHZ,0.5%,TP,10.0X5.0X	
FAN	AH31-10020A	FAN-DC;D0620B-12M,12VDC/0.16A,	
FIC2	1204-001281	IC-AUDIO PROCESSOR;TDA7439,DIP,30P,400MI	
FJ1	3711-003771	CONNECTOR-HEADER;2WALL,32P,1R,1.25mm,ANG	
FJ2	3711-003735	CONNECTOR-HEADER;BOX,20P,2R,2.54MM,ANGLE	
HJ1	3722-000363	JACK-PHONE;9P,6.4MM,AU,BLK,-	
IFE1	AH40-10001U	TUNER;FE337-A05,-,75OHM	
RBD1	0402-001010	DIODE-BRIDGE;GBU6D,200V,6A,SIP-4	
RBD12	AH62-30127A	HEAT SINK-TR;-,AL,-,T2.0,-,WHT,-,MAX870	
RBD2	0402-001010	DIODE-BRIDGE;GBU6D,200V,6A,SIP-4	
RC10	2401-001942	C-AL;3300UF,20%,35V,GP,BK,18X35.5MM	
RC15	2401-000375	C-AL;100UF,5%,100V,GP,TP,10X20,5MM	
RC7	2401-003267	C-AL;4700UF,20%,80V,GP,BK,30X40,10	
RC8	2401-003267	C-AL;4700UF,20%,80V,GP,BK,30X40,10	
RC9	2401-001942	C-AL;3300UF,20%,35V,GP,BK,18X35.5MM	
RIC2	1203-000276	IC-POSI.FIXED REG.;7805,TO-220,3P,-,PLAS	
RIC2	AH62-30060A	HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-7000,-	
RIC3	1203-000110	IC-NEGA.FIXED REG.;7912,TO-220,3P,-,PLAS	
RIC3	AH62-30060A	HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-7000,-	
RIC5	1203-000242	IC-POSI.FIXED REG.;7812,TO-220,3P,-,PLAS	
RQ1	0502-000425	TR-POWER;2SD2395-F,NPN,2W,TO-220FN,BK,1	
RQ11	0502-000303	TR-POWER;KSD882,NPN,1W,TO-126,TP,160-32	
RQ2	0502-000424	TR-POWER;2SB1566-F,PNP,2W,TO-220FN,BK,1	
RQ3	0502-000425	TR-POWER;2SD2395-F,NPN,2W,TO-220FN,BK,1	
RQ6	0502-000424	TR-POWER;2SB1566-F,PNP,2W,TO-220FN,BK,1	
RR14	13954-100-310	CERAMIC-PIPE;PI1.4 15MM WHT	
RR14	2003-000314	R-METAL OXIDE;47OHM,5%,2W,AE,TP,6X16MM	
RR18	13954-100-310	CERAMIC-PIPE;PI1.4 15MM WHT	
RR18	2003-000473	R-METAL OXIDE(S);10OHM,5%,3W,AA,TP,6X16M	
RWA1	AH39-20560P	LEAD CONNECTOR-ASSY;-,5264,51088,8p,300m	
TFL1	2903-000105	FILTER-CERAMIC;BP,10.7MHZ+-25KHZ,180KHZ+	
TFL3	2903-000105	FILTER-CERAMIC;BP,10.7MHZ+-25KHZ,180KHZ+	
TFL4	2903-000148	FILTER-CERAMIC;BP,450KHZ+-1KHZ,-,6DB,-,B	
TIC1	AH14-10007H	IC;LA1836,DIP,STICK IF+MPX	
TIC2	AH14-10007G	IC;LC72131,DIP,STICK PLL	
TJ2	3716-000201	TERMINAL-BLOCK;NON SOLDER,4P,4MM,-,	
TL1	AH27-80060A	COIL-OSC;RBW07VB,345UH,AM+RF	
TL2	AH26-10001E	TRANS-IF;KS940228-09,-,-,7.6X12.0,-,450K	
TL3	AH26-10020A	TRANS-DET;-,7KLL,DET,-,7.8MM,91PF,11.32M	
TX1	2802-000215	RESONATOR-CERAMIC;19KHZ,+-38HZ,-,7.0X3.5	
TX2	2801-003152	CRYSTAL-UNIT;7.2MHZ,20PPM,28-AAS,12PF,50	
VJ1	3722-000377	JACK-RCA;4P/2C,3.5MM,SN,BLK,#16~22	

Location no.	Code no.	Description & Specifiation	Remarks
VWA1	3711-002809	CONNECTOR-HEADER;BOX,8P,1R,2MM,STRAIGHT,	
AH93-20003U	**ASSY-MAIN,CHIP;MAX870,MAIN,CHIP DOM**	**S.N.A**	
AC1	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
AC2L	2203-001640	C-CERAMIC,CHIP;390PF,10%,50V,X7R,TP,1608	
AC2R	2203-001640	C-CERAMIC,CHIP;390PF,10%,50V,X7R,TP,1608	
AR16R	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
AR22	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
AR23	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
AR2L	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
AR2R	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
AR3R	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
AR4R	2007-001039	R-CHIP;56Kohm,5%,1/10W,DA,TP,2012	
AR5L	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
AR5R	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
AR9	2007-001208	R-CHIP;82Kohm,5%,1/10W,DA,TP,2012	
AR9R	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
D1C4	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M	
D1C5	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M	
DC11	2203-000953	C-CERAMIC,CHIP;470pF,5%,50V,NPO,TP,2012,	
DC17	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012	
DC18	2203-001143	C-CERAMIC ;68nF,10%,50V,X7R,2012,2mm,TP	
DC19	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
DC2	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
DC20	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
DC21	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
DC22	2203-000919	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
DC24	2203-001524	C-CERAMIC,CHIP;47pF,5%,50V,NPO,TP,2012,-	
DC25	2203-001524	C-CERAMIC,CHIP;47pF,5%,50V,NPO,TP,2012,-	
DC26	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
DC27	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
DC28	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
DC29	2203-000919	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
DC32	2203-000363	C-CERAMIC,CHIP;150pF,5%,50V,NPO,TP,2012,	
DC33	2203-000363	C-CERAMIC,CHIP;150pF,5%,50V,NPO,TP,2012,	
DC8	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
DC9	2203-000661	C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012,	
DIC1	AH14-10007E	IC;M65846FP,SOP,STICK DSP/ECHO	
DIC3	1201-000463	IC-OP AMP;074,SOP,14P,196MIL,SINGLE,88DB	
DR0	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
DR1	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
DR11	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012	
DR13	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
DR14	2007-001208	R-CHIP;82Kohm,5%,1/10W,DA,TP,2012	
DR15	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
DR16	2007-001208	R-CHIP;82Kohm,5%,1/10W,DA,TP,2012	
DR17	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
DR19	2007-000001	R-CHIP;68Kohm,5%,1/10W,DA,TP,2012	
DR2	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
DR23	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
DR24	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
DR25	2007-001028	R-CHIP;560ohm,1%,1/10W,DA,TP,2012	
DR26	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
DR29	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
DR30	2007-001028	R-CHIP;560ohm,1%,1/10W,DA,TP,2012	
DR31	2007-000001	R-CHIP;68Kohm,5%,1/10W,DA,TP,2012	

Electrical Parts List

Location no.	Code no.	Description & Specifiation	Remarks
DR32	2007-000001	R-CHIP;68Kohm,5%,1/10W,DA,TP,2012	
DR33	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
DR34	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
DR37	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
DR4	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
DR40	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
DR45	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
DR46	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
DR47	2007-001208	R-CHIP;82Kohm,5%,1/10W,DA,TP,2012	
DR48	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
DR49	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
DR55	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
DR56	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
DR57	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012	
DR6	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
DR74	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
DR9	2007-001208	R-CHIP;82Kohm,5%,1/10W,DA,TP,2012	
F1C1	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M	
FR10L	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
FR10R	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
FR1L	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
FR1R	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
FR2L	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
FR2R	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
FR3L	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
FR3R	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
FR4R	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
FR5L	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
FR5R	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
FR6L	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
FR6R	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
FR8L	2007-000518	R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012	
FR9L	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
FR9R	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
H1C1	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M	
HR2R	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012	
HR3L	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
HR3R	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
HR4L	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
HR4R	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
J1	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J10	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J11	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J12	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J13	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J14	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J16	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J18	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J19	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J2	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J20	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J21	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J3	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J30	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J31	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J4	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J5	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J9	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
RR13	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
RR2	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
RR9	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
TC1	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
TC100	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
TC11	2203-000408	C-CERAMIC,CHIP;180pF,5%,50V,NPO,TP,2012,	
TC12	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
TC14	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
TC16	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
TC17	2203-000429	C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,-	
TC2	2203-001517	C-CERAMIC,CHIP;15pF,5%,50V,NPO,TP,2012,-	
TC23	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
TC24	2203-001223	C-CERAMIC,CHIP;820PF,10%,50V,X7R,2012,2.	
TC26	2203-000802	C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012,	
TC27	2203-000802	C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012,	
TC3	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
TC34	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
TC35	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
TC37	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
TC38	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
TC41	2203-001611	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,2	
TC42	2203-001517	C-CERAMIC,CHIP;15pF,5%,50V,NPO,TP,2012,-	
TC5	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012,	
TC6	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V,TP,2	
TC8	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
TC91	2203-000595	C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012,	
TC92	2203-000595	C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012,	
TR1	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
TR10	2007-000308	R-CHIP;10ohm,5%,1/10W,DA,TP,2012	
TR11	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
TR12	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
TR13	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012	
TR15	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
TR18	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
TR19	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
TR2	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR23	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
TR26	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
TR27	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR28	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR29	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012	
TR30	2007-000593	R-CHIP;22ohm,5%,1/10W,DA,TP,2012	
TR31	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
TR33	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
TR34	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012	
TR36	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012	
TR4	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
TR40	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR41	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR42	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR44	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
TR46	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
TR47	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR48	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
TR49	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
TR5	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
TR50	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
TR51	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
TR6	2007-001028	R-CHIP;560ohm,1%,1/10W,DA,TP,2012	
TR7	2007-000518	R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012	
TR8	2007-000822	R-CHIP;390ohm,5%,1/10W,DA,TP,2012	
TR9	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	

Location no.	Code no.	Description & Specifiation	Remarks
VC2L	2203-000595	C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012,	
VC2R	2203-000595	C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012,	
VR1L	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
VR1R	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
VR2L	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
VR2R	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	

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AC1L	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	
AC1R	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	
AC21	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	
AC22	2401-001572	C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM	
AC3L	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	
AC3R	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	
AC4L	2401-001895	C-AL;100uF,20%,16V,GP,6.3x11mm,2.5m	
AC4R	2401-001895	C-AL;100uF,20%,16V,GP,6.3x11mm,2.5m	
AC5L	2201-000619	C-CERAMIC,DISC;5pF,0.3pF,50V,CH,TP,7x4,5	
AC5R	2201-000619	C-CERAMIC,DISC;5pF,0.3pF,50V,CH,TP,7x4,5	
AC6	2401-000385	C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M	
AC7	2401-000385	C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M	
AC8	2401-000385	C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M	
AC9	2401-000385	C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M	
AC9L	2301-000375	C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7	
AC9R	2301-000375	C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7	
AD10	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
AD11	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
AD2	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
AD3	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
AD4	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
AD5	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
AD6	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
AQ10	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,800mW,TO-92	
AQ11	0501-000407	TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9	
AQ1L	0501-000407	TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9	
AQ1R	0501-000407	TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9	
AQ3	0504-000146	TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO-	
AQ4	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-	
AQ7	0504-000146	TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO-	
AQ8L	0501-000407	TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9	
AR10	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
AR11	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
AR12	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
AR13	2004-000798	R-METAL;33Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
AR14	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4	
AR15	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4	
AR16	2001-000588	R-CARBON;3.3Kohm,5%,1/4W,AA,TP,2.4x6.4m	
AR17	2001-000588	R-CARBON;3.3Kohm,5%,1/4W,AA,TP,2.4x6.4m	
AR1L	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
AR1R	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
AR20	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
AR21	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
AR3L	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
AR4L	2001-000858	R-CARBON;56KOHM,1%,1/8W,AD,TP,1.8X3.2MM	
AR6L	2001-000858	R-CARBON;56KOHM,1%,1/8W,AD,TP,1.8X3.2MM	
AR6R	2001-000858	R-CARBON;56KOHM,1%,1/8W,AD,TP,1.8X3.2MM	
AR8	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
AR8L	2003-000468	R-METAL OXIDE(S);10OHM,5%,1W,AA,TP,3.3X9	
AR8R	2003-000468	R-METAL OXIDE(S);10OHM,5%,1W,AA,TP,3.3X9	
AZD1	0403-000363	DIODE-ZENER;UZ6.8BH,6.8V,6.8-7.2V,500MW	
AZD2	0403-000363	DIODE-ZENER;UZ6.8BH,6.8V,6.8-7.2V,500MW	
DC0	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	
DC1	2401-001968	C-AL;470NF,20%,50V,GP,TP,5X11MM,5	
DC10	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	
DC12	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
DC13	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
DC14	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
DC15	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
DC16	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
DC18	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
DC23	2401-001895	C-AL;100uF,20%,16V,GP,6.3x11mm,2.5m	
DC3	2401-001887	C-AL;100NF,20%,50V,-,TP,4X7MM,5	
DC4	2401-001887	C-AL;100NF,20%,50V,-,TP,4X7MM,5	
DC5	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	
DC6	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	
DC7	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	
DQ1	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-	
DQ2	0504-000146	TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO-	
DQ3	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-	
DR10	2001-001000	R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
DR12	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR18	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR20	2001-000411	R-CARBON;18Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR21	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR22	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
DR27	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR28	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR3	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR35	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
DR36	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
DR43	2003-000500	R-METAL OXIDE(S);150ohm,5%,1W,AA,TP,3.3x	
DR44	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR5	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR7	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DR71	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
DR72	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
DR73	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
DR8	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DZD1	0403-000354	DIODE-ZENER;UZ5.1B,5.1V,4.8-5.4V,500MW,D	
FC1	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	
FC10L	2301-000375	C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7	
FC10R	2301-000375	C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7	
FC11L	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
FC11R	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
FC1L	2401-000475	C-AL;10UF,20%,50V,GP,-,5X11,2MM	
FC1R	2401-000475	C-AL;10UF,20%,50V,GP,-,5X11,2MM	
FC2	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	
FC2L	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
FC2R	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
FC3	2401-001102	C-AL;330UF,20%,16V,GP,TP,8X12,5	
FC3L	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
FC3R	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
FC4	2401-000475	C-AL;10UF,20%,50V,GP,-,5X11,2MM	
FC4L	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
FC4R	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
FC5	2301-000412	C-FILM,PEF;22NF,10%,50V,TP,6.5X10.5X4MM,	
FC5L	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	

Electrical Parts List

Location no.	Code no.	Description & Specifiation	Remarks
FC5R	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
FC6L	2301-000453	C-FILM,PEF;5.6NF,10%,50V,TP,5.5X7X3MM,5M	
FC6R	2301-000453	C-FILM,PEF;5.6NF,10%,50V,TP,5.5X7X3MM,5M	
FC7L	2301-000393	C-FILM,PEF;18NF,10%,50V,TP,6.5X12.5X3.5M	
FC7R	2301-000393	C-FILM,PEF;18NF,10%,50V,TP,6.5X12.5X3.5M	
FC8L	2301-000412	C-FILM,PEF;22NF,10%,50V,TP,6.5X10.5X4MM,	
FC8R	2301-000412	C-FILM,PEF;22NF,10%,50V,TP,6.5X10.5X4MM,	
FC9L	2301-000375	C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7	
FC9R	2301-000375	C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7	
FD1	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	
FQ1	0504-000146	TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO-	
FQ1L	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
FQ1R	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
FR1	2001-000111	R-CARBON;150ohm,5%,1/4W,AA,TP,2.4x6.4mm	
FR2	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
FR4L	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
FR7L	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
FR7R	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
FR8R	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
HC1	2401-001364	C-AL;470UF,20%,16V,GP,TP,10X12MM,5M	
HC1L	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
HC1R	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
HC2	2401-001364	C-AL;470UF,20%,16V,GP,TP,10X12MM,5M	
HC2L	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
HC2R	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
HC4	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	
HD1	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	
HD2	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	
HD3	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
HD4	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
HD5	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
HD6	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
HL1	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,1/0.5	
HQ1L	0501-000407	TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9	
HQ1R	0501-000407	TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9	
HR1	2004-000207	R-METAL;100ohm,5%,1/4W,AA,TP,2.4x6.4mm	
HR1L	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
HR1R	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
HR2	2001-000027	R-CARBON;100ohm,5%,1/4W,AA,TP,2.4x6.4mm	
HR2L	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
HR3	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
HR5L	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
HR5R	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
HR6L	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
HR6R	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RC0	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
RC12	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
RC13	2401-001572	C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM	
RC14	2401-001572	C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM	
RC16	2201-000161	C-CERAMIC,DISC;10nF,+80-20%,500V,Y5V,TP,	
RC17	2201-000161	C-CERAMIC,DISC;10nF,+80-20%,500V,Y5V,TP,	
RC19	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
RC2	2401-001938	C-AL;22UF,20%,25V,GP,BK,5X11MM,2MM	
RC3	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,2MM	
RC5	2401-001938	C-AL;22UF,20%,25V,GP,BK,5X11MM,2MM	
RD1	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
RD3	0402-000151	DIODE-RECTIFIER;1N5392,100V,1.5A,DO-15	
RD4	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	
RD5	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	
RD6	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	
RD7	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
RQ12	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m	
RQ4	0501-000296	TR-SMALL SIGNAL;KSA709-Y,PNP,800mW,TO-92	
RQ5	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m	
RQ7	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m	
RR1	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RR11	2001-000019	R-CARBON(S);10ohm,5%,1/2W,AA,TP,2.4x6.4m	
RR12	2004-000903	R-METAL;4.7KOHM,5%,1/2W,AA,TP,3.3X9MM	
RR19	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RR20	2001-000613	R-CARBON;3.9Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RR21	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RR22	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RR23	2001-001153	R-CARBON(S);47OHM,5%,1/2W,AA,TP,2.4X6.4M	
RR24	2001-001153	R-CARBON(S);47OHM,5%,1/2W,AA,TP,2.4X6.4M	
RR26	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RR27	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RR28	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RR3	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RR4	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RR8	2001-001178	R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4	
RZD1	0403-000399	DIODE-ZENER;UZP9.1B,9.1V,8.5-9.6V,1W,DO	
RZD3	0403-000357	DIODE-ZENER;UZ5.6BM,5.6V,5.4-5.8V,500MW	
RZD4	0403-000357	DIODE-ZENER;UZ5.6BM,5.6V,5.4-5.8V,500MW	
RZD5	0403-000564	DIODE-ZENER;TZP16A,16V,15.3-17.1V,1W,DO-	
RZD6	0403-000564	DIODE-ZENER;TZP16A,16V,15.3-17.1V,1W,DO-	
TC10	2401-000303	C-AL;100uF,20%,25V,GP,TP,6.3x11,2.5	
TC101	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3	
TC13	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
TC15	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
TC17	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
TC18	2401-001968	C-AL;470NF,20%,50V,GP,TP,5X11MM,5	
TC19	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
TC20	2401-001022	C-AL;3.3UF,20%,50V,GP,-,5X11,2MM	
TC21	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,	
TC22	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
TC25	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
TC29	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
TC31	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
TC32	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
TC33	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
TC36	2401-002189	C-AL;330uF,20%,10V,GP,BK,8x11.5mm,5	
TC39	2401-001968	C-AL;470NF,20%,50V,GP,TP,5X11MM,5	
TC4	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
TC40	2401-000303	C-AL;100uF,20%,25V,GP,TP,6.3x11,2.5	
TC9	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
TD1	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
TD2	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
TD3	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
TD4	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
TD7	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
TD8	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
TQ2	0501-000392	TR-SMALL SIGNAL;KSC838-O,NPN,250MW,TO-92	
TQ3	0501-000392	TR-SMALL SIGNAL;KSC838-O,NPN,250MW,TO-92	
TQ4	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,800mW,TO-92	
TQ5	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
TQ6	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
TQ7	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
TR16	2001-000527	R-CARBON;22OHM,5%,1/8W,AA,TP,1.8X3.2MM	

Location no.	Code no.	Description & Specifiation	Remarks
TR17	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
TR24	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR25	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR3	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
TR32	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR35	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR37	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR38	2001-000117	R-CARBON(S);68ohm,5%,1/2W,AA,TP,2.4x6.4m	
TR39	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR43	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR45	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
TR50	2001-000938	R-CARBON;68OHM,5%,1/8W,AA,TP,1.8X3.2MM	
TR52	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
TR53	2001-000855	R-CARBON;560ohm,5%,1/4W,AA,TP,2.4x6.4mm	
TSR1	2103-000290	VR-SEMI;20KOHM,30%,1/10W,TOP	
TSR2	2103-000492	VR-SEMI;5KOHM,30%,1/10W,TOP	
TZD1	0403-000562	DIODE-ZENER;MTZ7.5B,7.5V,7.07-7.45V,500m	
TZD2	0403-000393	DIODE-ZENER;UZP5.1B,5.1V,4.8-5.4V,1W,DO	
VC1L	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
VC1R	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	

AH90-10739N ASSY-POWER PCB;MAX870,SEM S.N.A

AH93-10005G ASSY-POWER,MANU;MAX870,POWER MANU SEM S.N.A

PC1	2201-000520	C-CERAMIC,DISC;4.7NF,+80-20%,400VAC,Y5V,	
PC2	2201-000520	C-CERAMIC,DISC;4.7NF,+80-20%,400VAC,Y5V,	
PJ1	3711-000190	CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,STRA	
PL1	AH27-10001F	COIL-CHOKE;27UH,K,Q30,-,-,DR(6.5*7.5),-,	
PL2	AH27-10001F	COIL-CHOKE;27UH,K,Q30,-,-,DR(6.5*7.5),-,	
PW1	3711-003112	CONNECTOR-HEADER;BOX,8P,1R,2.5MM,STRAIGH	
RF2	3601-000248	FUSE-FERRULE;250V,2A,TIME LAG,GLASS,5X20	
RF3	3601-000282	FUSE-FERRULE;250V,4A,TIME LAG,GLASS,5X20	
FUSE1	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	
RCW1	3711-000190	CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,STRA	
RCW3	3708-001044	CONNECTOR-FPC/FC/PIC;5P,1.5MM,STRAIGHT,S	
RF4	3601-000282	FUSE-FERRULE;250V,4A,TIME LAG,GLASS,5X20	
FUSE1	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	
RCW1	3711-000190	CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,STRA	
RCW3	3708-001044	CONNECTOR-FPC/FC/PIC;5P,1.5MM,STRAIGHT,S	

AH93-30005P ASSY-POWER,TAPG;MAX870,POWER,AUTO SEM S.N.A

RF1	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	
RF2	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	
RF3	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	
RF4	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	

AH90-10740X ASSY-FRONT PCB;MAX850,SPA

AH93-10003H ASSY-FRONT,MANU;MAX850,FRONT MANU SPA

EVR1	3406-001022	SWITCH-ROTARY;5V,0.5MA,24PULSE/NO CLICK,	
FCW2	3708-000454	CONNECTOR-FPC/FC/PIC;22P,1.25MM,STRAIGHT	
FCW2	3809-001034	CABLE-FLAT;30V,80C,170MM,22P,1.25MM,UL28	
FCW3	3708-000449	CONNECTOR-FPC/FC/PIC;7P,1.25MM,STRAIGHT,	
FCW3-1	3708-000307	CONNECTOR-FPC/FC/PIC;7P,1.25MM,ANGLE,SN	
FCW3-1	3809-001092	CABLE-FLAT;30V,80C,300mm,7P,1.25mm,UL289	
FWC1	3710-001271	CONNECTOR-SOCKET;32P,1R,1.25mm,STRAIGHT-	
MJOG1	3406-001023	SWITCH-ROTARY;5V,0.5MA,24DETENT/CLICK,12	
R-EYE	AH59-60001J	MODULE-REMOCON;GP1U271R,38KHZ,-,MESH,-,	
UIC3	1204-000156	IC-EQUALIZER;BA3834S,DIP,18P,-,PLASTIC,7	
UX1	2802-000181	RESONATOR-CERAMIC;6MHZ,0.3%,BK,9.0X4.0X7	
UX2	2801-001394	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAY,12.5	
VFD	AH07-20045S	VF-DISPLAY;SVA-16MM14,16SEG,125.0X40.0,M	
VFD	AH61-20483A	HOLDER-VFD;-,ABS,94HB,BLK,-,MAX870	

AH93-20003E ASSY-FRONT,CHIP;MAX850,FRONT CHIP SPA

UC101	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
UC17	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
UC200	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
UC24	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
UC48	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
UC51	2203-001619	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2	
UC52	2203-001619	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2	
UC53	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,TP,2012	
UC54	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
UC55	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
UC57	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
UC58	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
UIC1	AH09-10062Y	IC-MCU;LC866548V-XXXX,100P,QFP,MAX850	
UIC2	AH14-10004L	IC;NJU3718,SOP,BULK	
UIC5	0801-000305	IC-CMOS LOGIC;7SU04,INVERTER,SOP,5P,150M	
UIC5	0801-000305	IC-CMOS LOGIC;7SU04,INVERTER,SOP,5P,150M	
UR1	2007-000565	R-CHIP;220Kohm,5%,1/10W,DA,TP,2012	
UR105	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
UR111	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR112	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR113	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR114	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR120	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR130	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR135	2007-001201	R-CHIP;820ohm,5%,1/10W,DA,TP,2012	
UR136	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR137	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR137	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR138	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
UR142	2007-001201	R-CHIP;820ohm,5%,1/10W,DA,TP,2012	
UR143	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR144	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR145	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
UR146	2007-000267	R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012	
UR147	2007-000518	R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012	
UR148	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
UR149	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
UR150	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
UR151	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
UR152	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
UR153	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
UR154	2007-001201	R-CHIP;820ohm,5%,1/10W,DA,TP,2012	
UR155	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR156	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR157	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012	
UR158	2007-000267	R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012	
UR159	2007-000518	R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012	
UR160	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
UR162	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
UR163	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
UR169	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR171	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
UR172	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
UR173	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	

Location no.	Code no.	Description & Specifiation	Remarks
UR174	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
UR2	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR200	2007-000565	R-CHIP;220Kohm,5%,1/10W,DA,TP,2012	
UR201	2007-001654	R-CHIP;10Mohm,1%,1/10W,DA,TP,2012	
UR21	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR27A	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
UR3	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
UR300	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR301	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR302	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR303	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR304	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR305	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR306	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR307	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR308	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR309	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR310	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR311	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR312	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR313	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR314	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR315	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR316	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR317	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR318	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR319	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR320	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR321	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR322	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR323	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR324	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR326	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR327	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR38	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR39	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR4	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
UR40	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR41	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR411	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR412	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR413	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR414	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
UR42	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR43	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR44	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR45	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR46	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR47	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR48	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR49	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR50	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR500	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR501	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR51	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR52	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR53	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR600	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR601	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR603	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR604	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR605	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR606	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
UR607	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR608	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR7	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR75	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
UR76	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR77	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR78	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR8	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
UR80	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR84	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR85	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
UR86	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR88	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR89	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR90	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
UR91	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	

AH93-30003U ASSY-FRONT,TAPG;MAX850,FRONT,AUTO SPA

SW1	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW10	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW11	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW12	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW13	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW14	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW15	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW16	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW17	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW2	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW21	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW22	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW23	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW24	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW25	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW26	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW27	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW28	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW29	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW3	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW30	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW31	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW38	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW4	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW5	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW6	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW7	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW8	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
SW9	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S	
UC1	2201-000423	C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2.	
UC11	2201-000423	C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2.	
UC12	2201-000565	C-CERAMIC,DISC;47nF,20%,50V,Y5V,12.5x4.0	
UC13	2401-002017	C-AL;100uF,20%,6.3V,GP,TP,6.3x5,5mm	
UC14	2409-000123	C-EDL;47000UF,4UA,5.5V,-,BK,-,5MM	
UC15	2401-001572	C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM	
UC16	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7,5	
UC18	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
UC2	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	

Location no.	Code no.	Description & Specifiation	Remarks
UC21	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,	
UC22	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7,5	
UC23	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	
UC25	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	
UC27	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
UC3	2201-000423	C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2.	
UC4	2201-000423	C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2.	
UC5	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,	
UC51	2401-000911	C-AL;22UF,20%,16V,GP,TP,5X7,2MM	
UC7	2401-000752	C-AL;220NF,20%,50V,GP,BK,3X5,1MM	
UC9	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,	
UD10	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD11	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD12	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD13	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD14	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD15	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD16	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD50	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
UD9	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	
ULD1	0601-001051	LED;ROUND,GRN/RED,3.2MM,563/650NM	
ULD10	0601-000245	LED;ROUND,RED,3.1mm,650nm	
ULD11	0601-000245	LED;ROUND,RED,3.1mm,650nm	
ULD12	0601-000245	LED;ROUND,RED,3.1mm,650nm	
ULD16	0601-000245	LED;ROUND,RED,3.1mm,650nm	
ULD17	0601-000245	LED;ROUND,RED,3.1mm,650nm	
ULD18	0601-000141	LED;ROUND,GRN,3.1MM,555NM	
ULD19	0601-000141	LED;ROUND,GRN,3.1MM,555NM	
ULD2	0601-001051	LED;ROUND,GRN/RED,3.2MM,563/650NM	
ULD20	0601-000141	LED;ROUND,GRN,3.1MM,555NM	
ULD3	0601-001051	LED;ROUND,GRN/RED,3.2MM,563/650NM	
ULD4	0601-001051	LED;ROUND,GRN/RED,3.2MM,563/650NM	
ULD5	0601-000245	LED;ROUND,RED,3.1mm,650nm	
ULD6	0601-000141	LED;ROUND,GRN,3.1MM,555NM	
ULD7	0601-000141	LED;ROUND,GRN,3.1MM,555NM	
ULD8	0601-000141	LED;ROUND,GRN,3.1MM,555NM	
ULD9	0601-000245	LED;ROUND,RED,3.1mm,650nm	
UQ1	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
UQ10	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO-	
UQ11	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO-	
UQ12	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO-	
UQ13	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO-	
UQ15	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ16	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ17	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ18	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ19	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ20	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ4	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ5	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92	
UQ9	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO-	
UR10	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR100	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR101	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR102	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR103	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR104	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR106	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR107	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR108	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR109	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR11	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR110	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR116	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR117	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR118	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR12	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR121	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR13	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR138	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR14	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR140	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR141	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR164	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR165	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR166	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR167	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR168	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR170	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR175	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR176	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
UR177	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
UR178	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
UR179	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR500	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR502	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR55	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR56	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR57	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR58	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR59	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR6	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR60	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR61	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR63	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR64	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR65	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR66	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR67	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR70	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR71	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR72	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR73	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR74	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR79	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR81	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR82	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR83	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR92	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR93	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR94	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR95	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR96	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR97	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR99	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Location no.	Code no.	Description & Specifiation	Remarks

AH90-10741W ASSY-DECK PCB;MAX850,FUL

AH93-10003T ASSY-DECK,MANU;MAX850,DECK MANU FUL

DCW6	3710-001272	CONNECTOR-SOCKET;10P,1R,2.5mm,STRAIGHT-F	
DCW6-1	3711-003785	CONNECTOR-HEADER;NOWALL,10P,1R,2.5mm,STR	
DCW7	3710-001272	CONNECTOR-SOCKET;10P,1R,2.5mm,STRAIGHT-F	
DCW7-1	3711-003785	CONNECTOR-HEADER;NOWALL,10P,1R,2.5mm,STR	
DCW8	3710-000544	CONNECTOR-SOCKET;3P,1R,2.5MM,STRAIGHT,SN	
DCW8	3710-001248	CONNECTOR-SOCKET;3P,1R,2.5mm,STRAIGHT,SN	
DCW9	3710-001270	CONNECTOR-SOCKET;6P,1R,2.5mm,STRAIGHT-F,	
FJD2	3713-001128	CONNECTOR-HOUSING;20P,2.54MM,FEMALE,2R	
JIC3	1204-001297	IC-EQUALIZER;HA12203NT,DIP,42P,-,PLASTIC	
JIC6	AH14-10006F	IC;TC9173P,DIP,EXPANDER 16P	
JIC7	1201-000357	IC-PREAMP;3312,SIP,10P,-,-,55V/MV,PLASTI	
JL2L	AH26-10002X	COIL-TRAP;KS940830-05,BIAS-TRAP,30DB,7.6	
JL2R	AH26-10002X	COIL-TRAP;KS940830-05,BIAS-TRAP,30DB,7.6	
JL3	AH26-10003C	COIL-TRAP;PCHNS-5371EQJ,BIAS-TRAP,-,-,85	
JLPF1L	2909-000210	FILTER-LC;LP,-,1DB,TP,30DB/19KHZ,50DB/10	
JLPF1R	2909-000210	FILTER-LC;LP,-,1DB,TP,30DB/19KHZ,50DB/10	
TP1	3711-000907	CONNECTOR-HEADER;BOX,3P,1R,2mm,STRAIGHT,	
TP2	3711-000907	CONNECTOR-HEADER;BOX,3P,1R,2mm,STRAIGHT,	
TP3	3711-000907	CONNECTOR-HEADER;BOX,3P,1R,2mm,STRAIGHT,	

AH93-20003S ASSY-DECK,CHIP;MAX850,DECK CHIP FUL

J1	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J11	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J12	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J13	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J14	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J18	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J19	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J2	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J20	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J21	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J3	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J4	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J5	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J6	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J7	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J8	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
J9	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JC10L	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC10R	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC11L	2203-001036	C-CERAMIC,CHIP;5.6nF,10%,50V,X7R,TP,2012	
JC11R	2203-001036	C-CERAMIC,CHIP;5.6nF,10%,50V,X7R,TP,2012	
JC15L	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
JC15R	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
JC17L	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
JC17R	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
JC19L	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
JC19R	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
JC1L	2203-001058	C-CERAMIC,CHIP;560pF,5%,50V,NPO,TP,2012,	
JC1R	2203-001058	C-CERAMIC,CHIP;560pF,5%,50V,NPO,TP,2012,	
JC22L	2203-000727	C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012	
JC22R	2203-000727	C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012	
JC24	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
JC2L	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC2R	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC30L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JC30R	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JC31L	2203-000727	C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012	
JC31R	2203-000727	C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012	
JC32L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JC32R	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
JC39L	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012	
JC39R	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012	
JC3L	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC3R	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC42	2203-000417	C-CERAMIC,CHIP;18NF,10%,50V,X7R,TP,2012,	
JC43	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
JC46L	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
JC46R	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
JC48	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
JC4L	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,TP,2012	
JC4R	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,TP,2012	
JC60L	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC60R	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC8L	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
JC8R	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
JC9L	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JC9R	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
JIC1	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M	
JIC2	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M	
JIC5	AH14-10007D	IC;NJU3716M,SOP,STICK EXPANDER 16BIT	
JR10L	2007-000565	R-CHIP;220Kohm,5%,1/10W,DA,TP,2012	
JR10R	2007-000565	R-CHIP;220Kohm,5%,1/10W,DA,TP,2012	
JR11L	2007-001024	R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20	
JR11R	2007-001024	R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20	
JR12L	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
JR12R	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
JR13L	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
JR13R	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
JR14L	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
JR14R	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
JR17	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
JR1L	2007-000565	R-CHIP;220Kohm,5%,1/10W,DA,TP,2012	
JR1R	2007-000565	R-CHIP;220Kohm,5%,1/10W,DA,TP,2012	
JR22	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
JR23	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
JR24L	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
JR24R	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
JR25L	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
JR25R	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
JR27	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
JR2L	2007-001024	R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20	
JR2R	2007-001024	R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20	
JR32L	2007-000267	R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012	
JR32R	2007-000267	R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012	
JR33L	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
JR34L	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
JR34R	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
JR35L	2007-000518	R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012	
JR35R	2007-000518	R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012	
JR36L	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
JR36R	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
JR37L	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
JR37R	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
JR38L	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
JR38R	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
JR39L	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
JR39R	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	

Location no.	Code no.	Description & Specifiation	Remarks
JR3L	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
JR3R	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
JR40	2007-000498	R-CHIP;2.2MOHM,5%,1/10W,DA,TP,2012	
JR42L	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012	
JR42R	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012	
JR4L	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
JR4R	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
JR52	2007-000981	R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012	
JR53	2007-000221	R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012	
JR57	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
JR62	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
JR63	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012	
JR64L	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
JR70	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
JR8L	2007-000308	R-CHIP;10ohm,5%,1/10W,DA,TP,2012	
SC1L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SC1R	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SC8L	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012	
SC8R	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012	
SR16L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR16R	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR17L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR17R	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR18L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR1L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR1R	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR2L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR2R	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
SR6L	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	

AH93-30004M ASSY-DECK,TAPG;MAX850,DECK,AUTO FUL

JC12L	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
JC12R	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
JC13L	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC13R	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC14	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
JC16L	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC16R	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC18L	2401-001968	C-AL;470NF,20%,50V,GP,TP,5X11MM,5	
JC18R	2401-001968	C-AL;470NF,20%,50V,GP,TP,5X11MM,5	
JC20L	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC20R	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC21L	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC21R	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC23L	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC23R	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC25	2401-001080	C-AL;330NF,20%,50V,GP,-,5X11,2MM	
JC26	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC27	2401-000907	C-AL;22UF,20%,16V,GP,-,5X11,2MM	
JC28	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC33L	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC33R	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC34L	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC34R	2401-001465	C-AL;47UF,20%,10V,GP,-,5X11,2MM	
JC35L	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC35R	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC36	2401-001465	C-AL;47UF,20%,10V,GP,-,5X11,2MM	
JC37	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC38	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC40	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
JC41	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC44	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
JC45	2301-000404	C-FILM,PEF;2.2NF,10%,50V,TP,5.5X7X3.2MM,	
JC45L	2201-000368	C-CERAMIC,DISC;220pF,10%,50V,SL,TP,6.5x3	
JC45R	2201-000368	C-CERAMIC,DISC;220pF,10%,50V,SL,TP,6.5x3	
JC47	2401-000907	C-AL;22UF,20%,16V,GP,-,5X11,2MM	
JC48L	2401-001968	C-AL;470NF,20%,50V,GP,TP,5X11MM,5	
JC48R	2401-001968	C-AL;470NF,20%,50V,GP,TP,5X11MM,5	
JC49	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC50	2401-002180	C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM	
JC5L	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
JC5R	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
JC6L	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC6R	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
JC7L	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3	
JC7R	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3	
JD1	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
JD2	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
JD3	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
JD4	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
JD5	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
JL4	2701-000177	INDUCTOR-AXIAL;33UH,10%,2.5X3.4MM	
JQ10	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO-	
JQ11	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JQ12	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
JQ13	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
JQ14	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
JQ15	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
JQ16	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JQ19	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JQ1L	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
JQ1R	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
JQ20	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JQ3L	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m	
JQ3R	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m	
JQ4	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,800mW,TO-92	
JQ4L	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m	
JQ4R	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m	
JQ5	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JQ6	0501-000369	TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L,	
JQ7	0501-000369	TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L,	
JQ8	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JQ9L	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JQ9R	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-	
JR16	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR18	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR18L	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR18R	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR19L	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR19R	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR20	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR21L	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
JR21R	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
JR26	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR31L	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR31R	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR33R	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR41	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Location no.	Code no.	Description & Specifiation	Remarks
JR43	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR44	2001-001107	R-CARBON(S);220ohm,5%,1/2W,AA,TP,2.4x6.4	
JR51	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR54	2001-001178	R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4	
JR55	2001-001178	R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4	
JR56	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR58	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR5L	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR5R	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR6	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR60	2001-001178	R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4	
JR64R	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR65	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
JR67	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR69	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR7	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR71	2001-000456	R-CARBON;2.2ohm,5%,1/4W,AA,TP,2.4x6.4mm	
JR72	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3.2MM	
JR73	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3.2MM	
JR8R	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
JR9L	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JR9R	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
JSR1L	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	
JSR1R	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	
JSR2L	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	
JSR2R	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	
JSR3L	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	
JSR3R	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	
JSR4L	2103-000248	VR-SEMI;200KOHM,30%,1/10W,TOP	
JSR4R	2103-000248	VR-SEMI;200KOHM,30%,1/10W,TOP	
JSR5	2103-000341	VR-SEMI;2KOHM,30%,1/10W,TOP	
JSR6	2103-000341	VR-SEMI;2KOHM,30%,1/10W,TOP	
JZD1	0403-000562	DIODE-ZENER;MTZ7.5B,7.5V,7.07-7.45V,500m	
JZD2	0403-000562	DIODE-ZENER;MTZ7.5B,7.5V,7.07-7.45V,500m	
JZD3	0403-000355	DIODE-ZENER;UZ5.1BSB,5.1V,4.97-5.18V,50	
	3809-001034	CABLE-FLAT;30V,80C,170MM,22P,1.25MM,UL28	
AH90-10719E		**ASSY-PCB;G3A8-3VI/C,NEW**	
AH94-10025M		**ASSY-PCB,MANU;G3A8-3VI/C,NEW**	
	3708-001131	CONNECTOR-FPC/FC/PIC;5P,1.25MM,STRAIGHT,	
	3711-003379	CONNECTOR-HEADER;NOWALL,3P,1R,2.5MM,STRA	
SCW1	3711-002579	CONNECTOR-HEADER;WALL,22P,1R,2.5MM,ANGLE	
SCW2	3708-000507	CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE,SN	
SCW3	AH39-20025T	LEAD-CONNECTOR,ASSY;-,51004-08,35023-08,	
SCW4	AH39-20025S	LEAD-CONNECTOR,ASSY;-,51004-08,35023-08,	
AH94-30025M		**ASSY-PCB,AUTO;G3A8-3VI/C,NEW**	
SC1	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC11	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
SC2	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC3	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC4	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC5	2201-000163	C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6	
SC6	2201-000163	C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6	
SC7	2201-000163	C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6	
SC8	2401-000795	C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M	
SC9	2401-000795	C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M	
SIC1	1003-000298	IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST,	
SIC2	1003-000298	IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST,	
SIC3	AC14-12001G	IC;KA78L05,T,-	
SL1	2701-000179	INDUCTOR-AXIAL;33UH,10%,4.2X9.8MM	
SR1	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
SR2	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
SR3	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
SR4	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4	
SR5	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
SZD1	0403-000352	DIODE-ZENER;UZ4.7BM,4.7V,4.4-5.0V,500MW,	
SZD2	0403-000361	DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24V,50	
AH90-10737E		**ASSY-CD MAIN PCB;G3X8,NON ADJUST**	
AH93-10001Q		**ASSY-CD MAIN,MANU;G3X8,NON ADJUST**	
	3409-000174	SWITCH-LEAF;16VDC,500MA,10GF,SPST	
	3708-000177	CONNECTOR-FPC/FC/PIC;16P,1MM,ANGLE,SN	
	3708-000412	CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE,	
	3711-001136	CONNECTOR-HEADER;BOX,8P,1R,2mm,ANGLE,SN	
	3809-000202	CABLE-FLAT;30V,80C,82MM,16P,1MM,UL2896	
	AH62-30047A	HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555,-	
NXF100	2802-000211	RESONATOR-CERAMIC;16.93MHZ,0.5%,TP,10.0X	
AH93-20001P		**ASSY-CD MAIN,CHIP;G3X8,NON ADJUST**	
IC9223	1204-001286	IC-ASP;KB9223,QFP,80P,-,PLASTIC,6V,20	
IC9258	1003-000179	IC-MOTOR DRIVER;KA9258D,SOP,28P,-,SINGLE	
IC9286	0904-001159	IC-DSP;9286,8BIT,QFP,80P,-,1MHZ,TR,CM	
NC100	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
NC101	2203-000802	C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012,	
NC102	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m	
NC103	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC104	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC106	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
NC107	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC108	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC110	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
NC111	2203-000802	C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012,	
NC112	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC113	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC115	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V,TP,2	
NC116	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC118	2203-000787	C-CERAMIC,CHIP;330pF,5%,50V,NPO,TP,2012,	
NC119	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC120	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC121	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC124	2203-000919	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
NC125	2203-000802	C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012,	
NC190	2203-001256	C-CERAMIC,CHIP;8pF,0.25pF,50V,NPO,TP,201	
NC200	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
NC2000	2203-001026	C-CERAMIC,CHIP;4PF,0.25PF,50V,SL,TP,2012	
NC201	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m	
NC202	2203-001619	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2	
NC203	2203-001619	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2	
NC204	2203-000919	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
NC205	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC300	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC301	2203-000477	C-CERAMIC,CHIP;1uF,+80-20%,16V,Y5V,TP,20	
NC400	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC500	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC502	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC50L	2404-000367	C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,-	
NC50R	2404-000367	C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,-	
NC52L	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	

Location no.	Code no.	Description & Specifiation	Remarks
NC52R	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC53L	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC53R	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC54L	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
NC54R	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
NC602	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC603	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC800	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC804	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC901	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC902	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC903	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC904	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC905	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
ND200	0407-000101	DIODE-ARRAY;DA204K,20V,100MA,C2-3,SOT-23	
ND201	0407-000101	DIODE-ARRAY;DA204K,20V,100MA,C2-3,SOT-23	
NJR102	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR103	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR104	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR105	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR105	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR106	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR107	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR108	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR110	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR111	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR112	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR113	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR114	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR115	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR116	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR117	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR118	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR127	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR129	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR131	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR132	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR133	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR134	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR135	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR136	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR137	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR138	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR139	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR140	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR141	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR142	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR143	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR144	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR145	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR146	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR147	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR148	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR149	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR150	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR151	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR152	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR153	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR154	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR155	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR156	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR300	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR301	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR302	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR303	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR304	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR305	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR306	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR307	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR308	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJW320	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NL100	2703-000001	INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm	
NL300	3301-000325	CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,-	
NL301	2703-000001	INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm	
NL302	3301-000325	CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,-	
NL303	2703-000001	INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm	
NQ1502	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150MW,SOT-23,	
NR100	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR101	2007-000593	R-CHIP;22ohm,5%,1/10W,DA,TP,2012	
NR102	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR103	2007-000395	R-CHIP;150Kohm,5%,1/10W,DA,TP,2012	
NR104	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
NR105	2007-000830	R-CHIP;39Kohm,5%,1/10W,DA,TP,2012	
NR106	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
NR107	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
NR108	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
NR109	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR111	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
NR112	2007-001039	R-CHIP;56Kohm,5%,1/10W,DA,TP,2012	
NR113	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
NR114	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012	
NR115	2007-000444	R-CHIP;180KOHM,5%,1/10W,DA,TP,2012	
NR116	2007-001195	R-CHIP;820Kohm,5%,1/10W,DA,TP,2012	
NR117	2007-000898	R-CHIP;430KOHM,5%,1/10W,DA,TP,2012	
NR118	2007-001213	R-CHIP;82ohm,1%,1/10W,DA,TP,2012	
NR119	2007-000395	R-CHIP;150Kohm,5%,1/10W,DA,TP,2012	
NR120	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR121	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR200	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
NR201	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
NR202	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
NR203	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR204	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR300	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR400	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
NR401	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR500	2007-000395	R-CHIP;150Kohm,5%,1/10W,DA,TP,2012	
NR50L	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
NR50R	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
NR52L	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
NR52R	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
NR53L	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR53R	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR54L	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR54R	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR55L	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR55R	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR56L	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	

Location no.	Code no.	Description & Specifiation	Remarks
NR56R	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
NR57L	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR57R	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR601	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR602	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
NR603	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
NR604	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR606	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR804	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	

AH93-30001X ASSY-CD MAIN,AUTO;G3X8,NON ADJUST

NC105	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	
NC114	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5	
NC117	2301-000389	C-FILM,PEF;150NF,5%,50V,TP,12.5X15X7.5,7	
NC122	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NC501	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	
NC55L	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NC55R	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NC700	2401-000868	C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM	
NC701	2401-000868	C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM	
NC702	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	
NC703	2401-001364	C-AL;470UF,20%,16V,GP,TP,10X12MM,5M	
NC704	2401-000778	C-AL;220UF,20%,10V,GP,-,6.3X11,2.5M	
NC902	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	
NC903	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NIC05	AC14-12001G	IC;KA78L05,T,-	
NQ1501	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
NR555	2008-000141	R-FUSIBLE;2.2OHM,5%,1/4W,AA,TP,2.6X6.7MM	

Location no.	Code no.	Description & Specifiation	Remarks

- Option -

AH96-10001C ASS'Y-CD PACK; G3X8C,G3X8+UD SP

	3809-001034	CABLE-FLAT;30V,80C,170mm,22P,1.25mm,UL28	
	AH59-20004Y	DECK-CDP;CMS-P30AM6UD,-,-,-,-	
	AH59-20004Z	DECK-3CD CHANGER;CMS300UD,-,-,-,-	

AH90-10719E ASSY-PCB;G3A8-3VI/C,NEW

AH94-10025M ASSY-PCB,MANU;G3A8-3VI/C,NEW

	3708-001131	CONNECTOR-FPC/FC/PIC;5P,1.25mm,STRAIGHT,	
	3711-003379	CONNECTOR-HEADER;NOWALL,3P,1R,2.5mm,STRA	
SCW1	3711-002579	CONNECTOR-HEADER;WALL,22P,1R,2.5MM,ANGLE	
SCW2	3708-000507	CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE,SN	
SCW3	AH39-20025T	LEAD-CONNECTOR,ASSY;-,51004-08,35023-08,	
SCW4	AH39-20025S	LEAD-CONNECTOR,ASSY;-,51004-08,35023-08,	

AH94-30025M ASSY-PCB,AUTO;G3A8-3VI/C,NEW

AH41-10265C PCB-CD SUB;CD SUB,1L,FR-1,197X197X1.6T

SC1	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC11	2401-000240	C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM	
SC2	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC3	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC4	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
SC5	2201-000163	C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6	
SC6	2201-000163	C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6	
SC7	2201-000163	C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6	
SC8	2401-000795	C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M	
SC9	2401-000795	C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M	
SIC1	1003-000298	IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST,	
SIC2	1003-000298	IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST,	
SIC3	AC14-12001G	IC;KA78L05,T,-	
SJW1	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SJW2	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SJW3	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SJW4	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SJW5	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SJW6	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SJW7	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SJW8	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
SL1	2701-000179	INDUCTOR-AXIAL;33uH,10%,4.2x9.8mm	
SR1	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
SR2	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
SR3	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
SR4	2001-000028	R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4	
SR5	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
SZD1	0403-000352	DIODE-ZENER;UZ4.7BM,4.7V,4.4-5.0V,500mW,	
SZD2	0403-000361	DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24V,500	

AH90-10737E ASSY-CD MAIN PCB;G3X8,NON ADJUST

AH93-10001Q ASSY-CD MAIN,MANU;G3X8,NON ADJUST

	3409-000174	SWITCH-LEAF;16Vdc,500mA,10gf,SPST	
	3708-000177	CONNECTOR-FPC/FC/PIC;16P,1MM,ANGLE,SN	
	3708-000412	CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE,	
	3711-001136	CONNECTOR-HEADER;BOX,8P,1R,2mm,ANGLE,SN	
	3809-000202	CABLE-FLAT;30V,80C,82MM,16P,1MM,UL2896	
	AH61-22002A	HOLDER-PCB;-,NYLON 66,-,-,OD3.4,DVC-650S	
	AH62-30047A	HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555,-	
NXF100	2802-000211	RESONATOR-CERAMIC;16.93MHz,0.5%,TP,10.0x	

AH93-20001P ASSY-CD MAIN,CHIP;G3X8,NON ADJUST

IC9223	1204-001286	IC-ASP;KB9223,QFP,80P,-,PLASTIC,6V,20	
IC9258	1003-000179	IC-MOTOR DRIVER;KA9258D,SOP,28P,-,SINGLE	
IC9286	0904-001159	IC-DSP;9286,8BIT,QFP,80P,-,1MHz,TR,CM	
NC100	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
NC101	2203-000802	C-CERAMIC,CHIP:33nF,10%,50V,X7R,TP,2012,	
NC102	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m	
NC103	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC104	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC106	2203-000892	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
NC107	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC108	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC110	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
NC111	2203-000802	C-CERAMIC,CHIP:33nF,10%,50V,X7R,TP,2012,	
NC112	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC113	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC115	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V,TP,2	
NC116	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC118	2203-000787	C-CERAMIC,CHIP;330pF,5%,50V,NPO,TP,2012,	
NC119	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC120	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC121	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC124	2203-000919	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
NC125	2203-000802	C-CERAMIC,CHIP:33nF,10%,50V,X7R,TP,2012,	
NC190	2203-001256	C-CERAMIC,CHIP;8pF,0.25pF,50V,NPO,TP,201	
NC200	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
NC2000	2203-001026	C-CERAMIC,CHIP;4PF,0.25PF,50V,SL,TP,2012	
NC201	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m	
NC202	2203-001619	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2	
NC203	2203-001619	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2	
NC204	2203-000919	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
NC205	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC300	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC301	2203-000477	C-CERAMIC,CHIP;1uF,+80-20%,16V,Y5V,TP,20	
NC400	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC500	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC502	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC50L	2404-000367	C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,-	
NC50R	2404-000367	C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,-	
NC52L	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC52R	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC53L	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC53R	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC54L	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
NC54R	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,	
NC602	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC603	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC800	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC804	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC901	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC902	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
NC903	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
NC904	2203-000199	C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP,	
NC905	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,	
ND200	0407-000101	DIODE-ARRAY;DA204K,20V,100mA,C2-3,SOT-2	
ND201	0407-000101	DIODE-ARRAY;DA204K,20V,100mA,C2-3,SOT-2	

Location no.	Code no.	Description & Specifiation	Remarks
NJR102	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR103	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR104	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR105	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR105	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR106	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR107	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR108	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR110	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR111	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR112	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR113	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR114	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR115	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR116	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR117	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR118	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR127	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR129	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR131	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR132	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR133	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR134	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR135	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR136	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR137	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR138	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR139	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR140	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR141	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR142	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR143	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR144	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR145	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR146	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR147	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR148	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR149	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR150	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR151	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR152	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR153	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR154	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR155	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR156	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR300	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR301	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR302	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR303	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR304	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR305	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NJR306	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR307	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJR308	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NJW320	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
NL100	2007-000033	R-CHIP;0ohm,5%,1/8W,DA,TP,3216	
NL300	3301-000325	CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,-	
NL301	2703-000001	INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm	
NL302	3301-000325	CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,-	
NL303	2703-000001	INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm	
NQ1502	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150MW,SOT-23,	
NR100	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR101	2007-000593	R-CHIP;22ohm,5%,1/10W,DA,TP,2012	
NR102	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR103	2007-000395	R-CHIP;150Kohm,5%,1/10W,DA,TP,2012	
NR104	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
NR105	2007-000830	R-CHIP;39Kohm,5%,1/10W,DA,TP,2012	
NR106	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
NR107	2007-000338	R-CHIP;120Kohm,5%,1/10W,DA,TP,2012	
NR108	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
NR109	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR111	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
NR112	2007-001039	R-CHIP;56Kohm,5%,1/10W,DA,TP,2012	
NR113	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
NR114	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012	
NR115	2007-000444	R-CHIP;180KOHM,5%,1/10W,DA,TP,2012	
NR116	2007-001195	R-CHIP;820Kohm,5%,1/10W,DA,TP,2012	
NR117	2007-000898	R-CHIP;430Kohm,5%,1/10W,DA,TP,2012	
NR118	2007-001213	R-CHIP;82ohm,1%,1/10W,DA,TP,2012	
NR119	2007-000395	R-CHIP;150Kohm,5%,1/10W,DA,TP,2012	
NR120	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR121	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR200	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012	
NR201	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
NR202	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	
NR203	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR204	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
NR300	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR400	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
NR401	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR500	2007-000395	R-CHIP;150Kohm,5%,1/10W,DA,TP,2012	
NR50L	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
NR50R	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
NR52L	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
NR52R	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
NR53L	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR53R	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR54L	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR54R	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR55L	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR55R	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012	
NR56L	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
NR56R	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
NR57L	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR57R	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR601	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR602	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
NR603	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
NR604	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
NR606	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	
NR804	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	

AH93-30001X ASSY-CD MAIN,AUTO;G3X8,NON ADJUST

NC105	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	
NC114	2401-000419	C-AL;10UF,20%,16V,GP,-.4X7,5	
NC117	2301-000389	C-FILM,PEF;150nF,5%,50V,12.5x15x7.5,7mm,	
NC122	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NC501	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	

Location no.	Code no.	Description & Specifiation	Remarks
NC55L	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NC55R	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NC700	2401-000868	C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM	
NC701	2401-000868	C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM	
NC702	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	
NC703	2401-001364	C-AL;470UF,20%,16V,GP,TP,10X12MM,5M	
NC704	2401-000778	C-AL;220uF,20%,10V,GP,-,6.3x11,2.5m	
NC902	2401-000243	C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M	
NC903	2401-001238	C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM	
NIC05	AC14-12001G	IC;KA78L05,T,-	
NJW101	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW102	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW103	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW104	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW105	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW106	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW107	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW107	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW108	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
NJW109	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW110	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW111	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW112	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW113	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NJW114	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5	
NQ1501	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
NR555	2008-000141	R-FUSIBLE;2.2ohm,5%,1/4W,AA,TP,2.6x6.7mm	

OPTION

* MAX850/860/870/880 OUTPUT POWER OPTION LIST

- MAX850 SERIES - MAX850 ; 60W
- MAX870 SERIES - MAX870,MAX860 ; 80W
- MAX880 SERIES - MAX880 ; 120W

* Power-IC Option List

PCB Ass'y	Location no.	Code no.	Description & Specification	Model	IC Name
Main PCB Ass'y	AIC1	1201-001244	IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB	MAX-850	STK417-090
	AIC1	1201-001218	IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB	MAX-880	STK417-130
	AIC1	1201-001213	IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB	MAX-860 MAX-870	STK417-100

* Power Source Parts List

PCB Ass'y	Location no.	Code no.	Description & Specification	Model
Main PCB Ass'y	AC4,5	2401-001902	C-AL;100UF,20%,50V,GP,-,6.3X11,2.5	MAX850
		2401-000375	C-AL;100UF,20%,100V,GP,-,10X20.5	MAX880/870/860
	AC6,9	2401-000475	C-AL;10UF,20%,50V,GP,-,5X11,2.5	MAX850
		2401-000385	C-AL;10UF,20%,100V,GP,-,5X11,2.5	MAX880/870/860
	RC7,8	2401-001943	C-AL;3300UF,20%,50V,GP,-,25X40MM	MAX850
		2401-003266	C-AL; 4700UF,20%,63V,GP,-,30X30	MAX870/860
		2401-003267	C-AL; 4700UF,20%,80V,GP,-,30X30	MAX880
	RBD1,2	0402-000450	DIODE-BRIDGE ; PBL403,200V,4.0A	MAX850
		0402-001010	DIODE-BRIDGE ; GBU6D,200V,6A	MAX880/870/860
	AZD1,2	0403-000004	DIODE-ZENER ; UZ12BM,12V,11.6-12.4 V,500MW	MAX850 MAX880/870/860
		0403-000363	DIODE-ZENER ; UZD6.8BM,6.8V,0.5W	
	RBD12	AH62-30127A	HEAT-SINK-TR ; -,AL,-,T2,0,-,WHT,-	MAX880/870/860

*The Others Parts List

PCB Ass'y	Location no.	Code no.	Description & Specification	MAX850	MAX870 /860/880
Main PCB Ass'y	AR8L,R		10 ohm 1W	O	X
		2003-000471	20 ohm 2W	X	O
	AR16L	2001-000591	R-CARBON ; 3.3Kohm 5% 1/8W,AA TP,1.8*3.2mm	X	O
	AR16R	2007-000686	R-CHIP ; 3.3Kohm 5% 1/10W, DA,TP,2012	X	O
	AQ8L,R	0501-000407	TR-SMALL SIGNAL; KSD471AY,NPN,800MW	X	O
	AIC1S	6003-000276	SCREW ; 3*12 YEL	8EA	10EA
	AIC1S2	A0102-0011	SCREW ; 3*14 YEL	2EA	2EA

* Power PCB Pats Option List

PCB Ass'y	Location no.	Code no.	Description & Specification	MAX850		
				DUAL	230V	115V
Power PCB Ass'y	RF1	3601-000248	FUSE-FERRULE ; 250V,2A,TIME LAG, GLASS, 5*20	O	X	X
	RF2	3601-000248	FUSE-FERRULE ; 250V,2A,TIME LAG, GLASS, 5*20	O	O	X
		3601-000282	FUSE-FERRULE ; 250V,4A,TIME LAG, GLASS, 5*20	X	X	O
	RF3,4	3601-000263	FUSE-FERRULE ; 250V,3.15A,TIME LAG, GLASS, 5*20	O	O	O
	JWA	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	O	X	X
	JWB	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	O	X	X
	JWC	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	X	X
	JWD	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	O	X
	JWE	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	X	O
	JWF	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	X	O
	JWG	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	O	X	X

* Power PCB Pats Option List

PCB Ass'y	Location no.	Code no.	Description & Specification	MAX860		
				DUAL	230V	115V
Power PCB Ass'y	RF1	3601-000248	FUSE-FERRULE ; 250V,2A,TIME LAG, GLASS, 5*20	O	X	X
	RF2	3601-000248	FUSE-FERRULE ; 250V,2A,TIME LAG, GLASS, 5*20	O	O	X
		3601-000282	FUSE-FERRULE ; 250V,4A,TIME LAG, GLASS, 5*20	X	X	O
	RF3,4	3601-000282	FUSE-FERRULE ; 250V,4A,TIME LAG, GLASS, 5*20	O	O	O
	JWA	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	O	X	X
	JWB	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	O	X	X
	JWC	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	X	X
	JWD	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	O	X
	JWE	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	X	O
	JWF	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	X	X	O
	JWG	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5	O	X	X

*VFD List

PCB Ass'y	Location no.	Code no.	Description & Specification	MAX850	MAX860
Front PCB Ass'y	VFD	AH07-20045S	VF-DISPLAY ; SVA-16MM 14,16SEG, 125.0*40.0	O	O

*Power Transformer Code List

Code no.	Description & Specification	Model	Power Source
AH26-80142X	TRANS-POWER ; E185,8*57,115/230V, 50/60Hz	MAX-880	115/230V
AH26-80142Y	TRANS-POWER ; E185,8*57,115/230V, 50/60Hz	MAX-870/MAX-860	115/230V
AH26-80142Z	TRANS-POWER ; E185,8*57,115/230V, 50/60Hz	MAX-850	115/230V
AH26-80142U	TRANS-POWER ; E185,8*57,115/230V, 50/60Hz	MAX-850	115/230V
AH26-80142V	TRANS-POWER ; E185,8*57,115/230V, 50/60Hz	MAX-870/MAX-860	115/230V
AH26-80142W	TRANS-POWER ; E185,8*57,115/230V, 50/60Hz	MAX-880	115/230V

*BAND-Option List (Main PCB Ass'y)

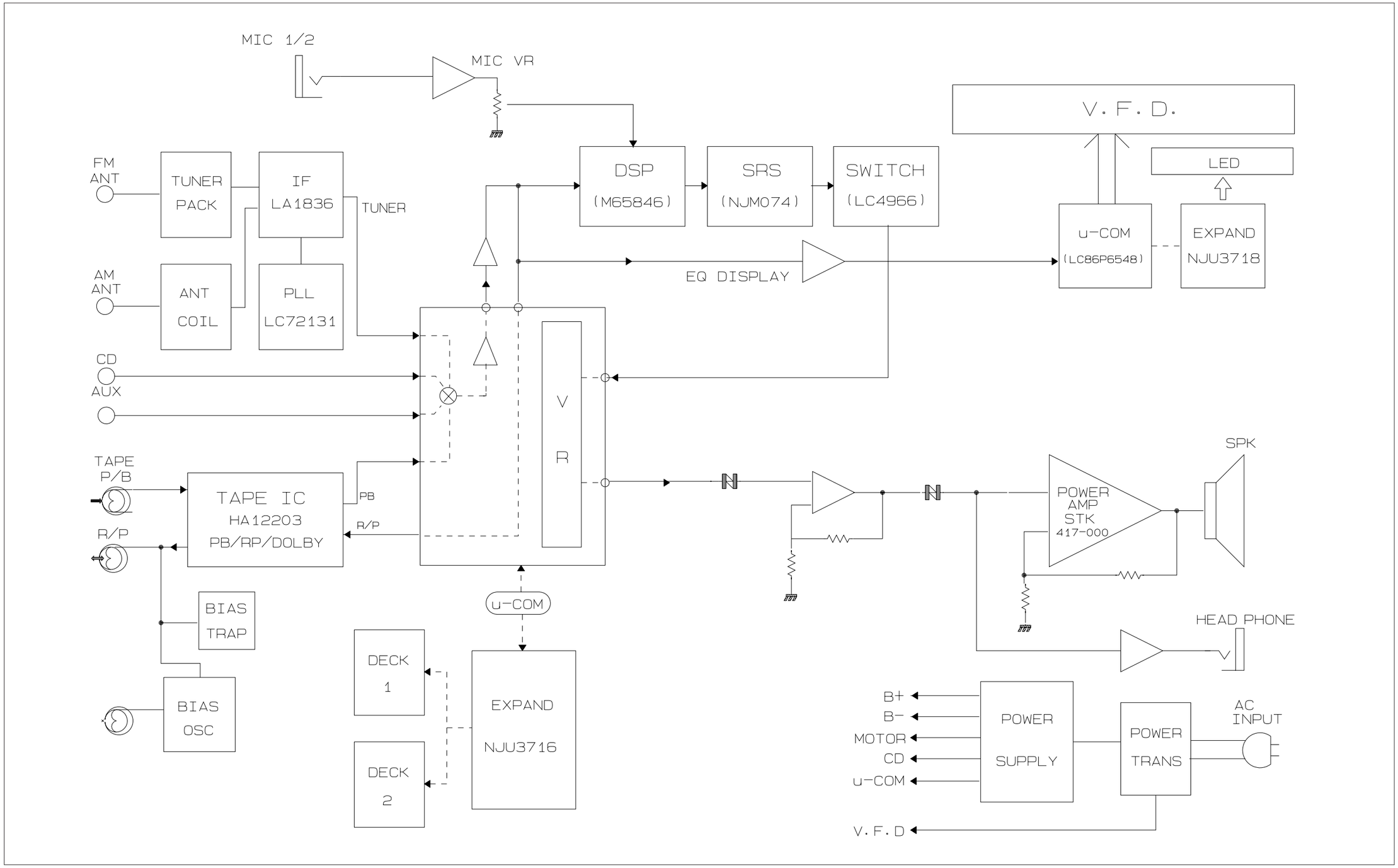
Location no.	Code no.	Description & Specification	L-BAND (FTZ,CE)	L-BAND (General)	T-BAND
TFE1	AH40-10001T	TUNER ; FE415-G11,-,75ohm	O	X	X
	AH40-10001U	TUNER ; FE337-A05,-,75ohm	X	O	O
J6,7,8	2707-000029	R-CHIP ; 0ohm, 5%,1/10W,DA,TP,2012	X	X	O
TR20,21	2707-000586	R-CHIP ; 22Kohm, 5%,1/10W,DA,TP,2012	O	O	X
TR22	2707-000300	R-CHIP ; 10ohm, 5%,1/10W,DA,TP,2012	O	O	X
JW3,4	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V,52.4MM	X	X	O
IQ5,6,7	0501-000398	TR-SMALL SIGNAL ; KSC945,NPN,250mW, TO-92,T	O	O	X
TFL1,3	2903-000102	FILTER-CERAMIC ; BP,10.7MHZ+ -25KHZ 150KHZ +	O	X	X
	2903-000105	FILTER-CERAMIC ; BP,10.7MHZ+ -25KHZ 180KHZ +	X	O	O
JW18	3811-000389	WIRE-NO SHEATH CU ; SPCW,300V,52.4MM	X	O	O
TFL2	2903-000105	FILTER-CERAMIC ; BP,10.7MHZ+ -25KHZ 180KHZ +	O	X	X
TL1	AH27-80060B	COIL-OSC ; RBQ-07VB,373UH,MW/LW-RF	O	O	X
	AH26-80060A	COIL-OSC ; RBW-07VB,345UH,AM+RF	X	X	O

*MIC Option List

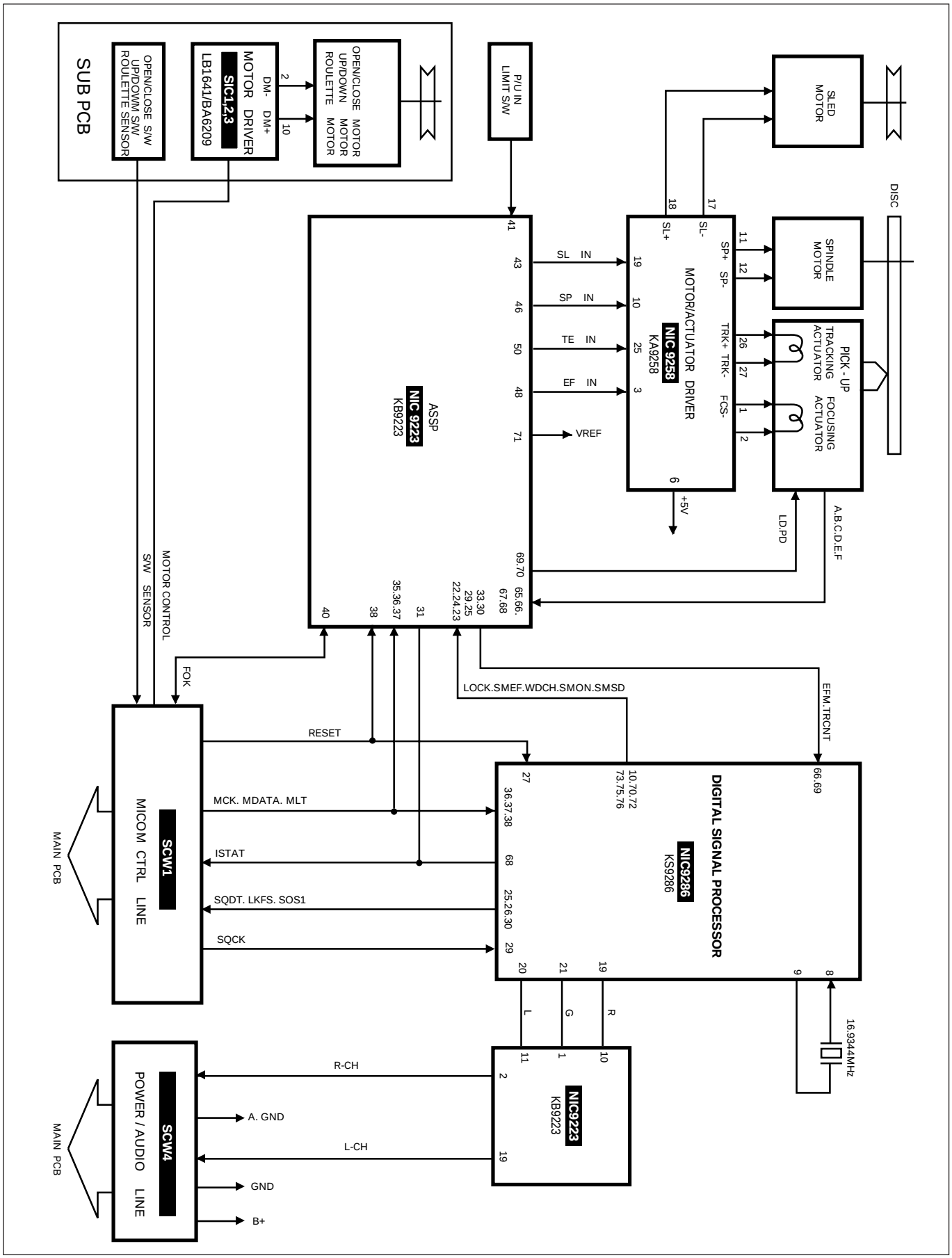
PCB Ass'y	Location No.	Code no.	Description & Specification	Mic Option	Without Mic Option
Front PCB Ass'y	MIC2,3	3722-001190	JACK-PHONE ; 9P/2C,6.43MM,AU,BLK,RC6701	O	X
	MVR1	2101-000130	VR-ROTARY ; 10Kohm,20%1/10W,TOP	O	X
	MIC1	1201-000163	IC-OP AMP ;4560,SOP,8P,150ML,DUAL,100V/M	O	X
	MQ1,2	0501-000407	TR-SMALL SIGNAL ; KSD471A-Y,NPN,800mW	O	X
	MQ3,UQ8	0501-000398	TR-SMALL SIGNAL ; KSC945-Y,NPN,250mW	O	X
	UR122	2001-000857	R-CARBON;560ohm, 5%,1/8W,AA,TP,1.8x3.2mm	O	X
	MR4	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	O	X
	ULD16	0601-000245	LED;ROUND,RED,3.1mm, 650nm	O	X
	SW38	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF	O	X
	MD3,4,5,6	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mV	O	X
	MC9,50,51	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM	O	X
	MC5	2401-000918	C-AL;22UF,20%,16V,-,TP,6.3X7.5MM	O	X
	MC10,11	2401-001931	C-AL;220UF,20%,50V,-,TP,4X7MM	O	X
	MC6,8	2401-001511	C-AL;47UF,20%,16V,-,TP,6X7MM	O	X
	MC7	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7MM	O	X
	MC3,24	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012	O	X
	MC12	2203-000818	C-CERAMIC,CHIP;33pF,5%,50V,NPO,TP,2012	O	X
	MR11,12	2007-000300	R-CHIP; 10Kohm,5%,1/10W,DA,TP,2012	O	X
	MR3,7,8,50,51, UR128	2007-000872	R-CARBON; 4.7Kohm,5%,1/10W,DA,TP,2012	O	X
	MR6	2007-000778	R-CHIP; 330Kohm,5%,1/10W,DA,TP,2012	O	X
	MR27	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	O	X
	UR119	2001-000734	R-CARBON; 4.7Kohm,5%,1/8W,DA,TP,2012	O	X
	JW324	2007-000029	R-CHIP; 0ohm,5%,1/10W,DA,TP,2012	O	X
	MC13	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012	O	X
	MC14	2203-000595	C-CERAMIC,CHIP;220pF,5%,50V,X7R,TP,2012	O	X
	MR5	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012	O	X
	UR153	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	O	X
	UR21	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP	O	X
	MR14,15	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP	O	X
	MR1,2	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP	O	X
	JW57	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM 1/0.5	O	X
	MIC OPTION	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	X	O

9. Block Diagrams

9-1 Main



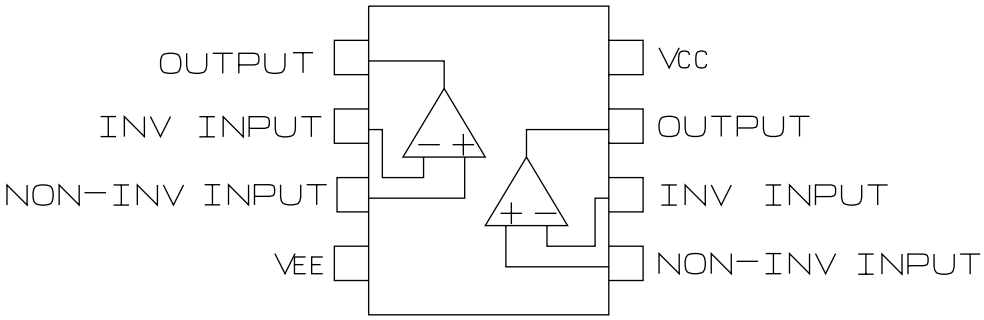
9-2 CD


SUB PCB
OPEN/CLOSE S/W
UP/DOWM S/W
ROULETTE SENSOR
DM-
DM+
MOTOR DRIVER
SIC1,2,3
LB1641/BA6209
OPEN/CLOSE MOTOR
UP/DOWN MOTOR
ROULETTE MOTOR
P/U IN
LIMIT S/W
SLED MOTOR
DISC
SPINDLE MOTOR
PICK - UP
TRACKING ACTUATOR
FOCUSING ACTUATOR
MOTOR/ACTUATOR DRIVER
NIC 9258
KA9258
SL+
SL-
SP+
SP-
TRK+
TRK-
FCS-
+5V
ASSP
NIC 9223
KB9223
SL IN
SP IN
TE IN
EF IN
VREF
LD.PD
A.B.C.D.E.F
S/W SENSOR
MOTOR CONTROL
FOK
LOCK.SMEF.WDCH.SMON.SMSD
EFM.TRCNT
RESET
MCK. MDATA. MLT
ISTAT
SQDT. LKFS. SOS1
SQCK
MICOM CTRL LINE
SCW1
MAIN PCB
DIGITAL SIGNAL PROCESSOR
NIC9286
KS9286
16.9344MHz
L
G
R
NIC9223
KB9223
R-CH
A. GND
L-CH
GND
B+
POWER / AUDIO LINE
SCW4
MAIN PCB

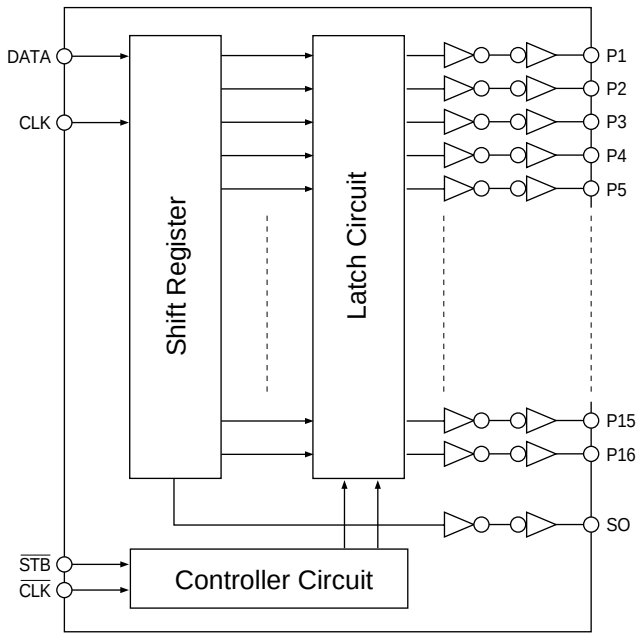
9-3 IC & TR Internal Diagrams

9-3-1 Main

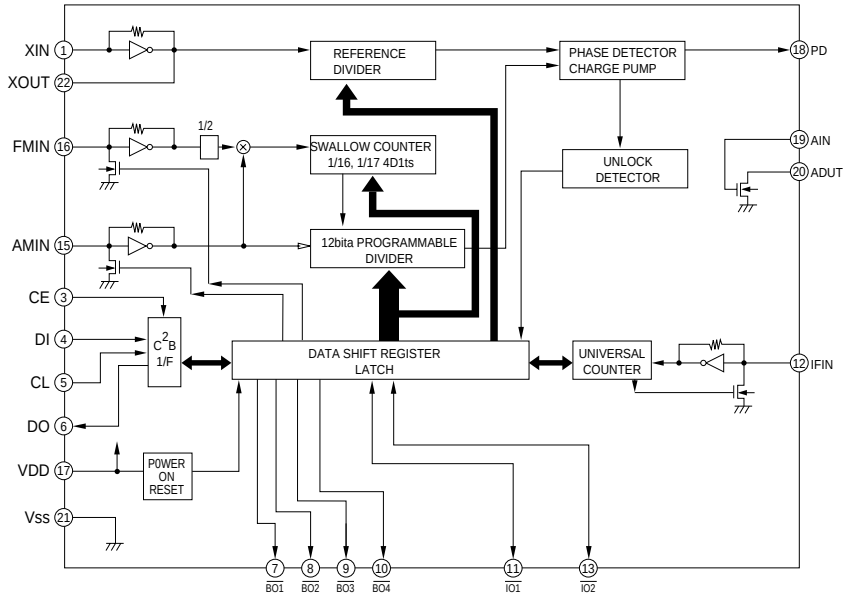
BA4560 : DIC4



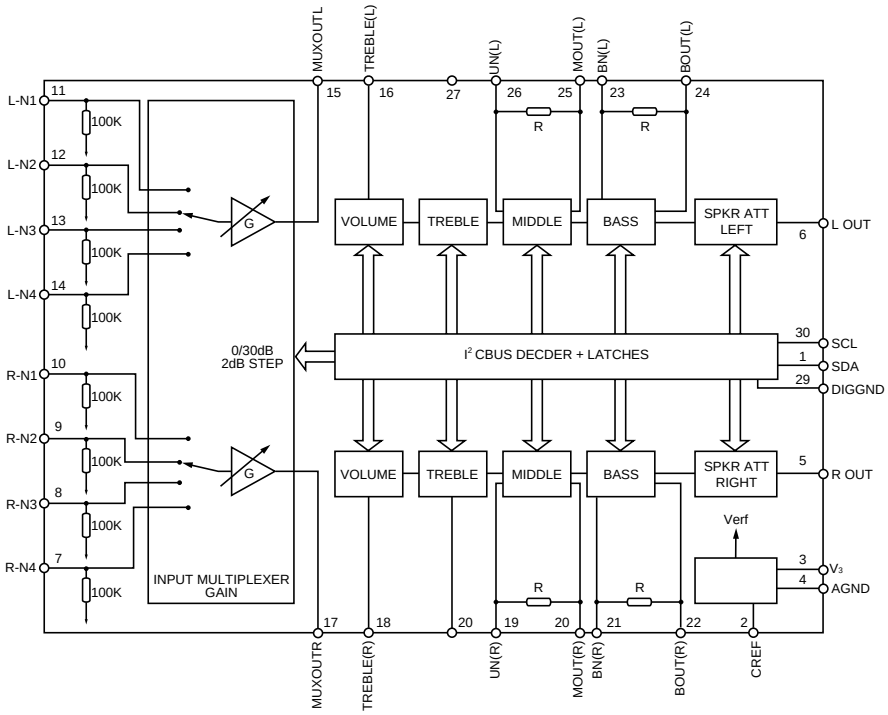
NJU3716M : JIC5



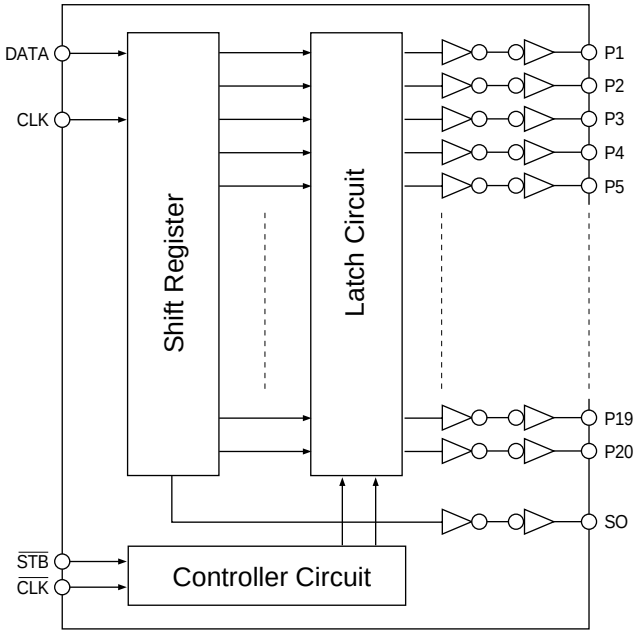
LC72131 : TIC2



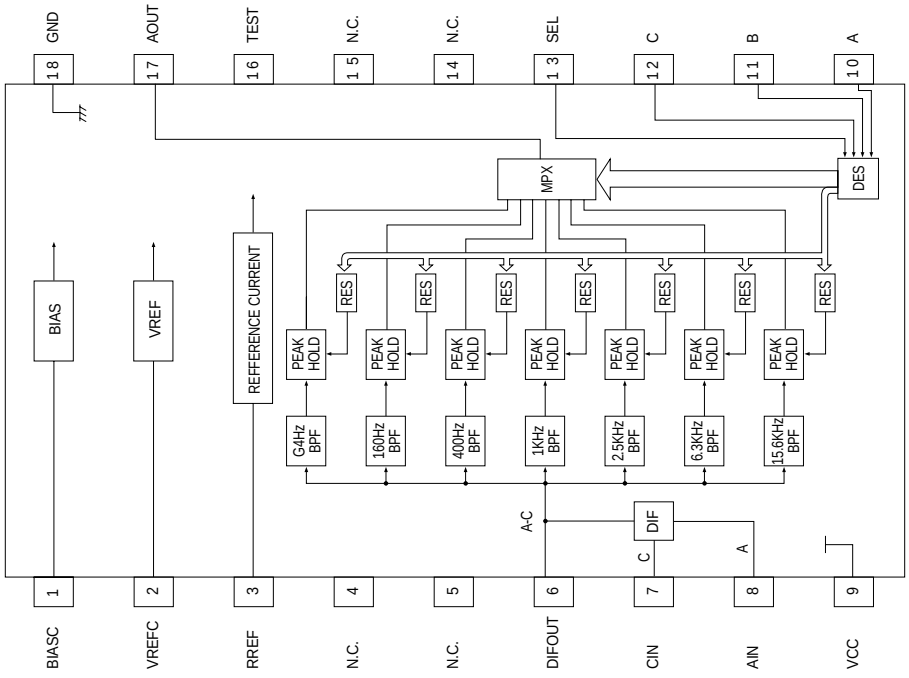
TDA7439: FIC2



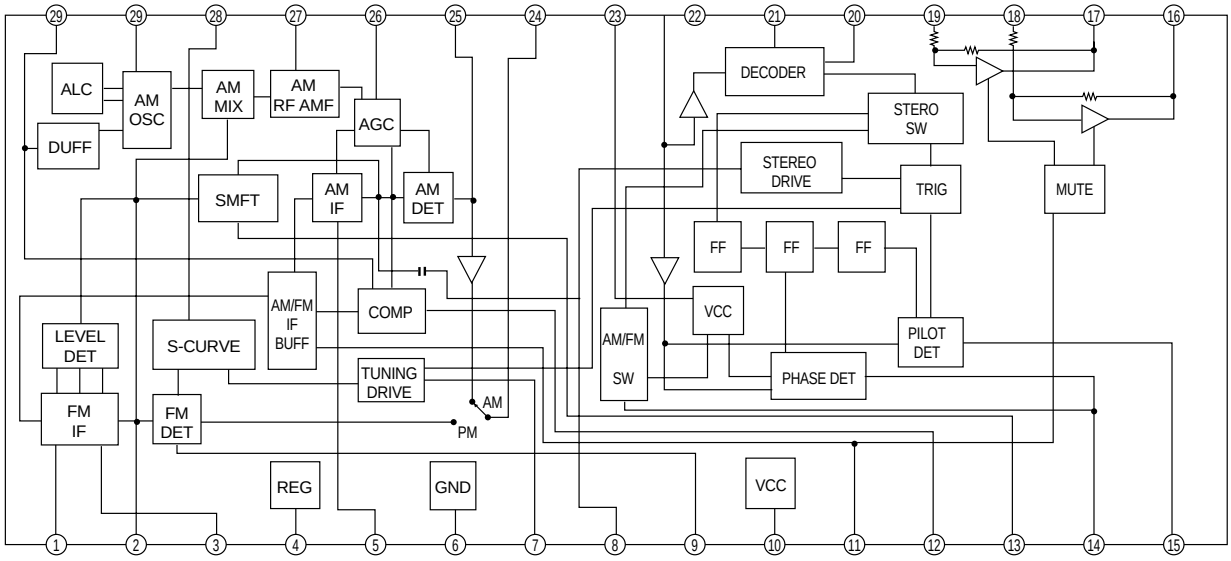
NJU3718 : UIC2



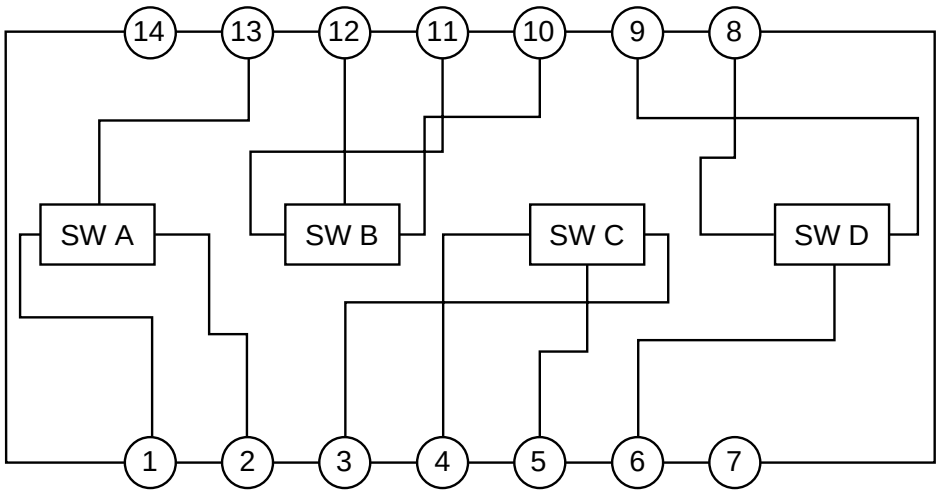
BA3834S : UIC3



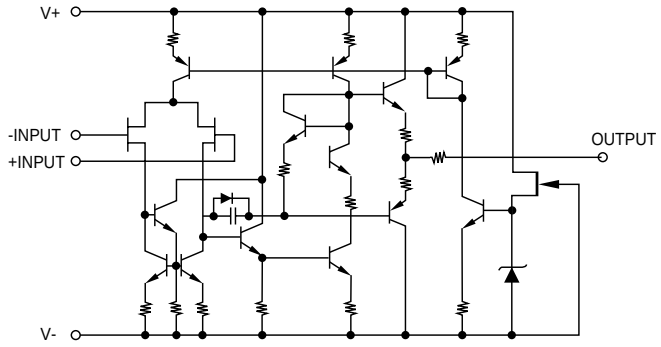
LA1836: TIC1



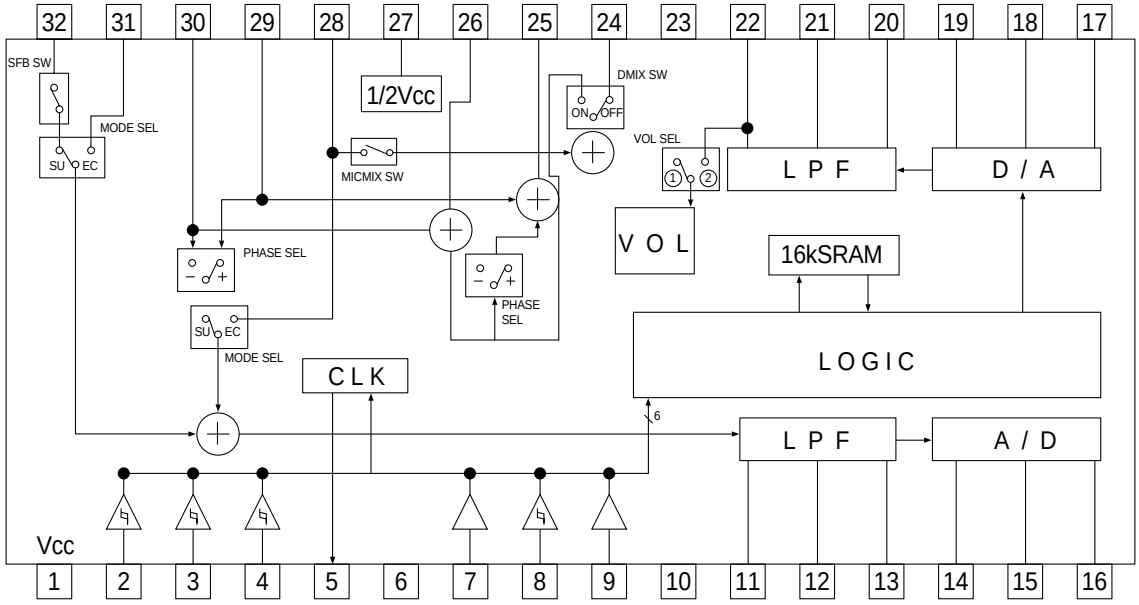
LC4966: DIC2



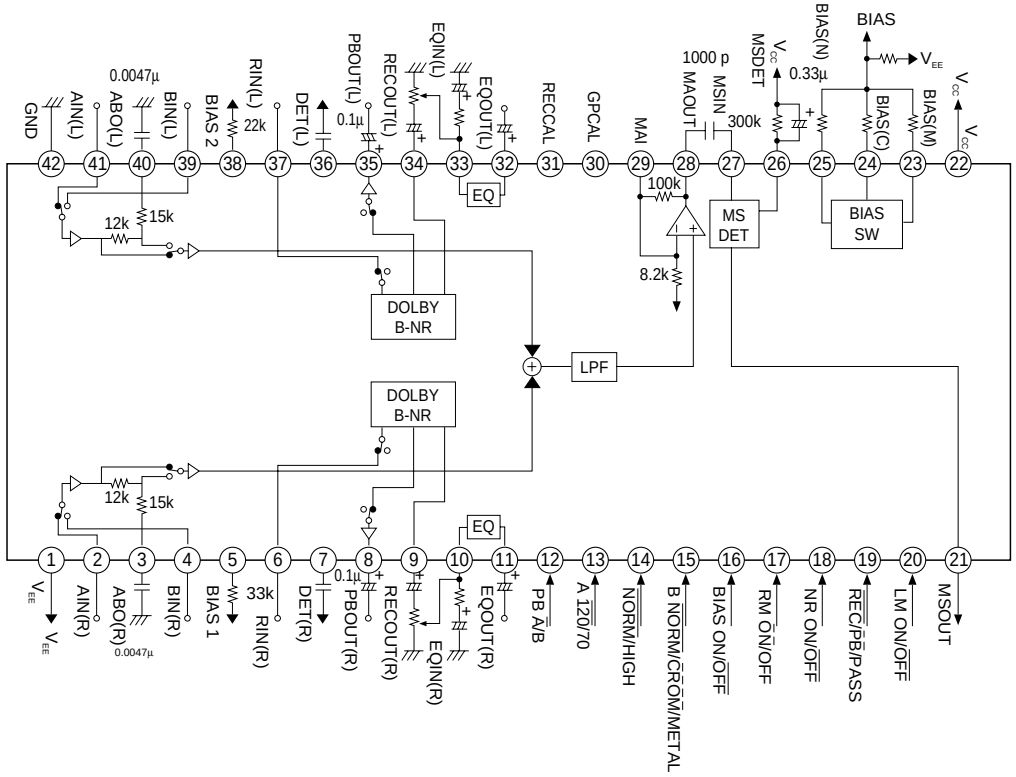
NJM074 : DIC3



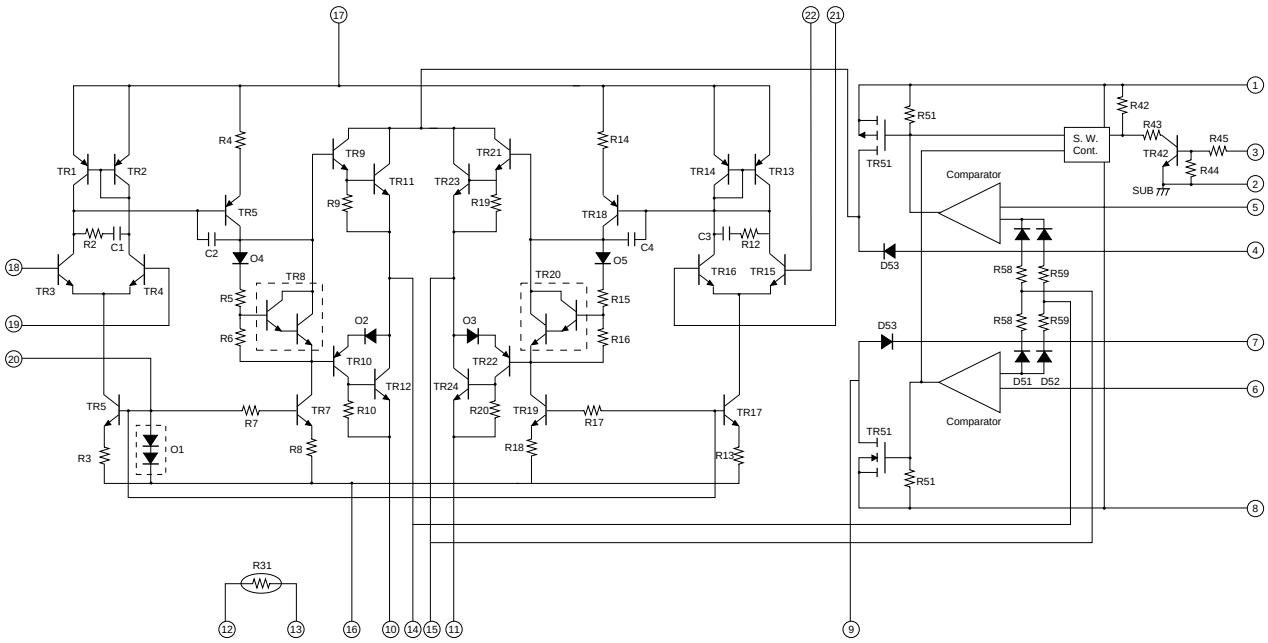
M65846FP : DIC1



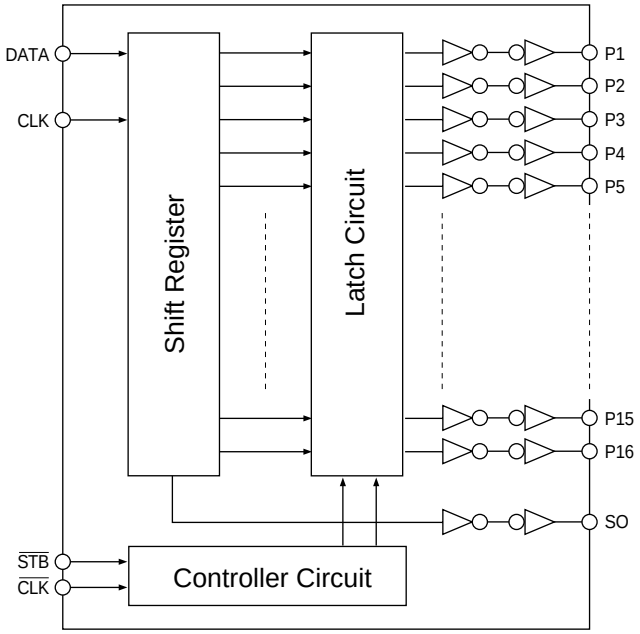
HA12203/HA12204 : JIC3



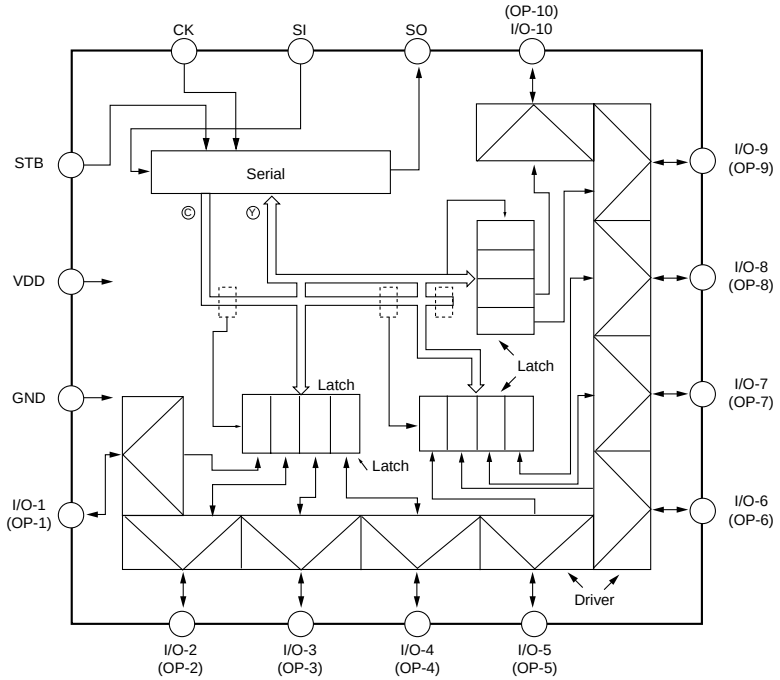
STK417-090: AIC1



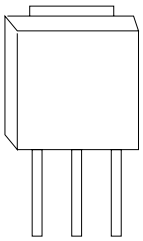
NJU3716M : JIC5



TC9173P : JIC6



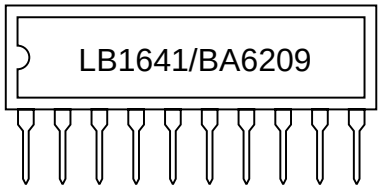
9-3-2 CD

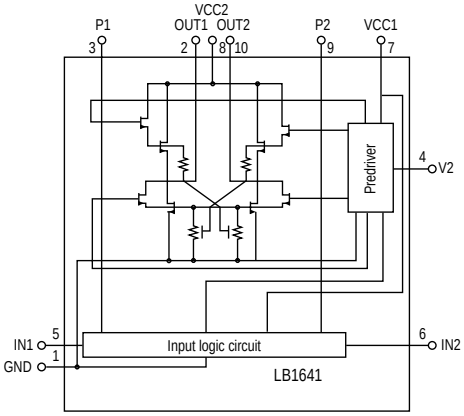


TR	1	2	3
KSR1003 A928	E	C	B

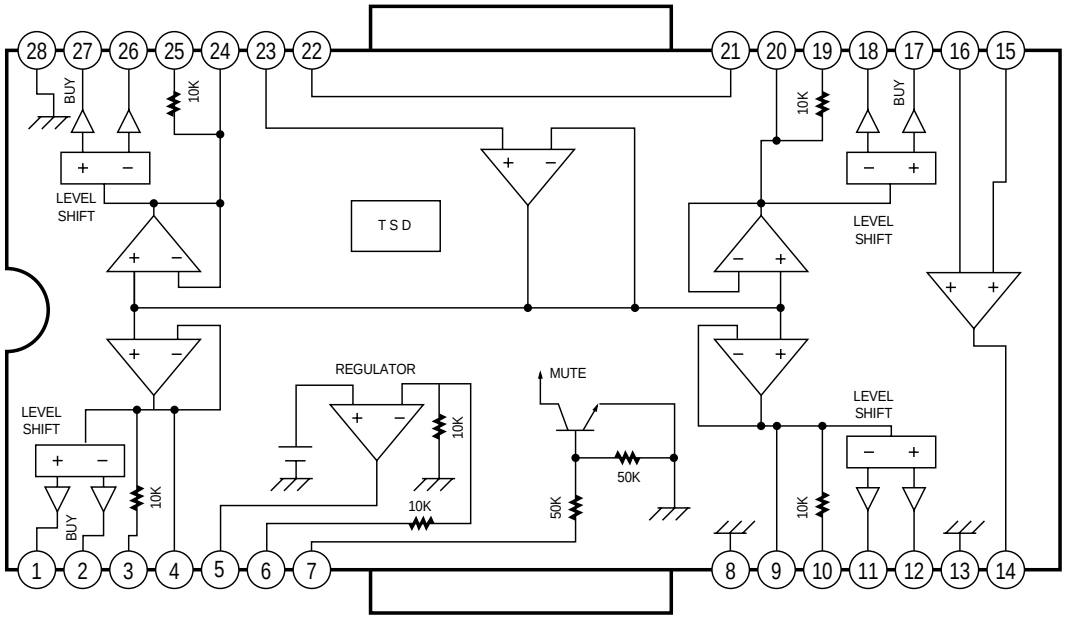
* NOTE : KSB564 = 'EBC' TYPE

LB1641/BA6209(MOTOR DRIVER) : SIC1,SIC2,SIC3,NIC1641

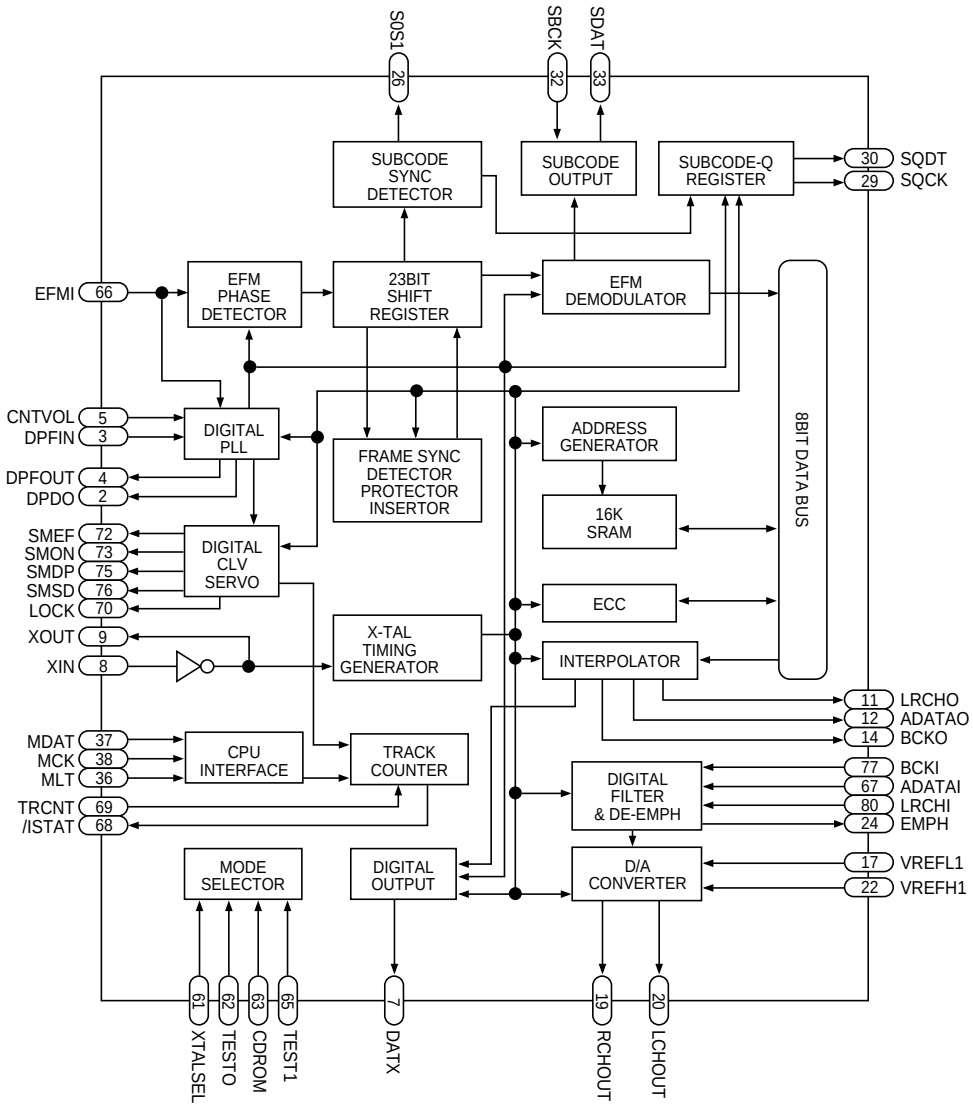




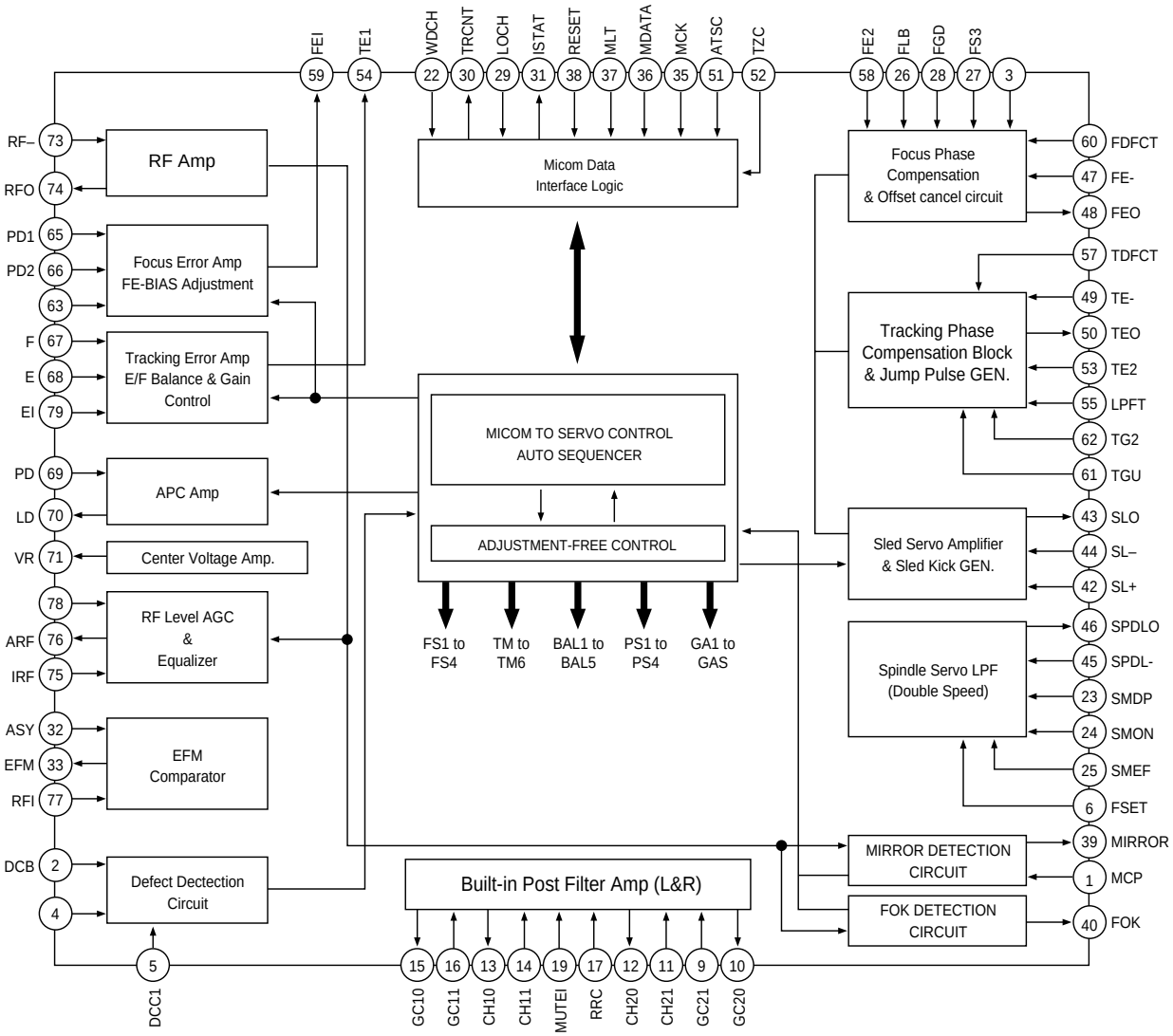
KA9258 : NIC9258



KS9286 : NIC9286



KB9223 : NIC9223



9-4 µ-COM : UIC1

No.	Port	Name	I/O	Function
1	P 16	D12	I	TC9173 INPUT
2	17	JOG	I	MULTI JOG IN
3	30	POWER	O	POWER ON/OFF
4	31	TUNED	I/O	TUNED/DSP MUTE
5	32	A/MUTE	O	AUDIO MUTE
6	33	CE11	O	LC72131(PLL) CE
7	34	DI1	I	LC72131 DATA INPUT
8	35	DO1	O	LC72131 /TDA7439
9	36	CLK1	O	LC72131 /TDA7439
10	37	CE31	O	M65846 CE
11	70	PSNS	I	POWER SENSE
12	RESET			
13	P 74	MO/ST	O	FM MONO/STEREO
14	75	CF2		SUB OSC(CLOCK)
15	VSS1	GND		MAIN GND
16	CF 1	XT1		MAIN OSC
17	2	XT2		MAIN OSC
18	VDD1			MAIN 5V
19	P 80	THS	I	POWER AMP PROTECT/HPS
20	81	AMPS	I	AMPS SIGNAL
21	82	EQ IN	I	EQUALIZER INPUT
22	83	KEY1	I	A/D KEY INPUT 1
23	84	KEY2	I	A/D KEY INPUT 2
24	85	JOG	I	MULTI JOG IN
25	86	KEY3	I	A/D KEY INPUT 3
26	87	MIC	I	MIC ON SNS
27	P 71	T/SENS	I	CD TRAY SENSE
28	72	SCOR	I	SCOR INT
29	73	REMO	I	REMOCON INPUT
30	S 0	G1	O	VFD GRID 1
31	1	2	O	VFD GRID 2
32	2	3	O	VFD GRID 3
33	3	4	O	VFD GRID 4
34	4	5	O	VFD GRID 5
35	5	6	O	VFD GRID 6
36	6	7	O	VFD GRID 7
37	7	8	O	VFD GRID 8
38	8	9	O	VFD GRID 9
39	9	10	O	VFD GRID 10
40	S 10	11	O	VFD GRID 11
41	11	12	O	VFD GRID 12
42	12	13	O	VFD GRID 13
43	13	14	O	VFD GRID 14
44	14	15	O	VFD GRID 15
45	15	16	O	VFD GRID 16
46	VDD3			
47	S 16	S1		VFD SEG 1
48	17	2		VFD SEG 2
49	18	3	O	VFD SEG3
50	19	4	O	VFD SEG4

No.	Port	Name	I/O	Function
51	VP			
52	S 20	S5	O	VFD SEG 5
53	21	S6	O	VFD SEG 6
54	22	S7	O	VFD SEG 7
55	23	S8	O	VFD SEG 8
56	24	S9	O	VFD SEG 9
57	25	S10	O	VFD SEG 10
58	26	S11	O	VFD SEG 11
59	27	S12	O	VFD SEG 12
60	28	S13	O	VFD SEG 13
61	29	S14	O	VFD SEG 14
62	30	S15	O	VFD SEG 15
63	31	S16	O	VFD SEG 16
64	32	S17	O	VFD SEG 17
65	PE 1	OPT	I	TUNER/TIME/PRO-LOGIC
66	2	LKFS	I	
67	3	FOK	I	FOCUS OK
68	4	SENSE	I	SENSE & LIMIT SWITCH
69	5	SENSE1	I	SENSE1
70	6	SW2	I	
71	7	SW1	I	
72	VDD 4			
73	PF 0	RL+	O	ROULETTE+
74	1	LAT1	O	LATCH
75	2	OPEN	O	OPEN MOTOR
76	3	CLOSE	O	CLOSE MOTOR
77	4	XRST	O	RESET
78	5	C-LAT	O	C-LATCH/REM DO/PRO DO
79	6	EMPH	O	EMPHASI/REM CE/PRO LED P
80	7	EVR	O	ERE VR SW
81	PG 0	VCLK	O	VCD-CLOCK/REM MUTE/PRO-L
82	1	VR	I	ELE VR SW
83	2	V-LAT	I	VCD LAT/REM NAR/PRO CE2
84	3	V-DATA	I/O	VCD DATA/REM CH/PRO CE1
85	P 00	MCK	O	DSP/SSP CONTROL CLOCK
86	01	C-DATA	O	C-DATA/REM CLK/PRO CLK
87	02	MDATA	O	DSP/SSP CONTROL DATA
88	03	1 SOL	O	1 DECK SOLENOID
89	VSS2			
90	VDD2			
91	P 04	CE32	O	TC9173 CE
92	05	MLT	O	DSP/SSP CONTROL LATCH
93	06	CE34	O	NJU3718 CHIP ENABLE
94	07	SOL2	O	2 DECK SOLENOID
95	10	TRCNT	O	LD ON
96	11	SQDT	I	SUBQ DATA INPUT
97	12	SQRT	O	SUBQ DATA INPUT CLOCK
98	13	CLK3	O	NJU3716/18/TC9173/M65846
99	14	DO3	O	NJU3716/18/TC9173/M65846
100	15	CE33	O	NJU3716 CE

NJU3718 : UIC2

No.	Name	Function
1	P 9	DISC2 LED
2	10	DISC3 LED
3	11	EQ A
4	12	EQ B
5	13	EQ C
6	14	REC/PAUSE
7	GND	
8	P 15	TUNER FUNCTION LED
9	16	CD FUNCTION LED
10	17	TAPE FUNCTION LED
11	18	AUX FUNCTION LED
12	19	ECHO LED / PRO LED
13	20	SCORE LED
14	S 0	
15	DO3	MICOM 99
16	CLK3	MICOM 98
17	CE34	MICOM 93
18	CLR	VDD
19	P1	STOP LED
20	P2	COMM` 1 LED
21	VSS	GND
22	P3	COMM` 2 LED
23	P4	COMM` 3 LED
24	P5	DISC 1 LED
25	P6	JOG LED
26	P7	CD MUTE
27	P8	VCD / REMAKE RESET
28	VDD	

NJU3716 : JIC5

No.	Name	Function
1	P 7	STS 1
2	8	R/P
3	9	P/B 1
4	10	MOTOR
5	11	HI / SP
6	GND	
7	P 12	REC 1
8	13	A/B
9	14	NOR/HI
10	15	REC MUTE
11	16	DOLBY NR
12	S 0	
13	DO3	
14	CLK3	
15	CE32	
16	CLR	
17	P 1	TUNER MODE
18	GND	
19	P 2	SRS
20	3	
21	4	STS
22	5	LINE MUTE
23	6	P/B
24	VDD	

TC9173 : JIC6

No.	Name	Function
1	GND	GND
2	P 1	REC / R
3	2	MODE / B
4	3	HALF / B
5	4	HALL / B
6	5	REC / F
7	6	MODE / A
8	7	HALF / A
9	8	NC
10	9	NC
11	10	HALL / A
12	DO 3	
13	DI 2	
14	CLK	
15	CE 33	
16	CLR	

9-5 RF AMP & Servo Processor(KB9223) : NIC9223

No.	Port	Description
1	MCP	Capacitor connection pin for mirror hold
2	DCB	Capacitor connection pin for defect Bottom hold
3	FRSH	Capacitor connection pin for time constant to generate focus search waveform
4	DCC2	The input pin through capacitor of defect bottom hold output
5	DCC1	The output pin of defect bottom hold
6	FSET	The peak frequency setting pin for focus, tracking servo and cut of frequency of CLV LPF
7	VDDA	Analog VCC for servo part
8	VCCP	Vcc for post filter
9	GC21	Amplifier negative input pin for gain and low pass filtering of DAC output CH2
10	GC20	Amplifier output pin for gain and low pass filtering of DAC output CH2
11	CH2I	The input pin for post filter channel2
12	GC2O	The output pin for post filter channel2
13	CH1O	The output pin for post filter channel1
14	CH1I	The input pin for post filter channel1
15	GC1O	Amplifier output pin for gain and low pass filtering of DAC output CH1
16	GC1I	Amplifier negative input pin for gain and low pass filtering of DAC output CH1
17	RRC	The pin for noise reduction of post filter bias
18	VSSP	VSS for post filter
19	MUTEI	The input pin for post filter muting control
20	ISET	The input pin for current setting of focus search, track jump and sled kick voltage
21	VREG	The output pin of regulator
22	WDCK	The clock input pin for auto sequence
23	SMDP	The input pin of CLV control output pin SMDP of DSP
24	SMON	The input pin for spindle servo ON through SMON of DSP
25	SMEF	The input pin of provide for an external LPF time constant
26	FLB	Capacitor connection pin to perform rising low bandwidth of focus loop
27	FS3	The pin for high frequency gain change of focus loop with internal FS3 pin switch
28	FGD	Reducing high frequency gain with capacitor between FS3 pin
29	LOCK	Sled runaway prevention pin
30	TRCNT	Track count output pin
31	ISTAT	Internal status output pin
32	ASY	The input pin for asymmetry control
33	EFM	EFM comparator output pin
34	VSSA	Analog VSS for servo part
35	MCK	Micom clock input pin
36	MDATA	Micom data input pin
37	MLT	Micom data latch input pin
38	RESET	Reset input pin
39	MIRROR	The mirror output for test
40	FOK	The output pin of focus OK comparator

No.	Port	Description
41	SSTOP	The pin for detection whether pick_up position is innermost or not
42	SL+	The noninverting input pin of sled servo amplifier
43	SLO	The output pin of sled servo amplifier
44	SL-	The inverting input pin of sled servo amplifier
45	SPDL-	The noninverting input pin of spindle servo amplifier
46	SPDLO	The output pin of spindle servo amplifier
47	FE-	The inverting input pin of focus servo amplifier
48	FEO	The output pin of focus servo amplifier
49	TE-	The inverting input pin of tracking servo amplifier
50	TEO	The output pin of tracking servo amplifier
51	ATSC	The input pin for Anti-shock detection
52	TZC	The comparator input pin for tracking zero crossing detection
53	TE2	Tracking servo input pin
54	TE1	Tracking error amplifier output pin
55	LPFT	The input pin of tracking error low pass filtering signal
56	DVDD	The power supply pin for logic circuit
57	TDFCT	The capacitor connectiong pin for tracking defect compensation
58	FE2	Focus servo input pin
59	FE1	Focus error amplifier output pin
60	FDFCT	The capacitor connection pin for focus defect compensation
61	TGU	The capacitor connection pin for high frequency tracking gain switch
62	TG2	The pin for high frequency gain change of tracking servo loop with internal TG2 switch
63	FEBIAS	Focus error bias voltage control pin
64	DVEE	The DVEE pin for logic circuit
65	PD1	The negative input pin of RF I/V amplifier1(A+C signal)
66	PD2	The negative input pin of RF I/V amplifier2(B+D signal)
67	F	The negative input pin of F I/V amplifier(F signal)
68	E	The negative input pin of E I/V amplifier(E signal)
69	PD	The input pin for APC
70	LD	The output pin for APC
71	VR	The output pin of (AVEE+AVCC)/2 voltage
72	VCC	VCC for RF part
73	RF-	RF summing amplifier inverting input pin
74	RFO	RF summing amplifier output pin
75	IRF	The input pin for AGC
76	ARF	The output pin for AGC
77	RFI	The input pin for EFM comparating
78	CAGC	The capacitor connection pin for AGC
79	EI	Feedback input pin of E I/V amplifier for EF Balance control
80	GND	GND for RF part

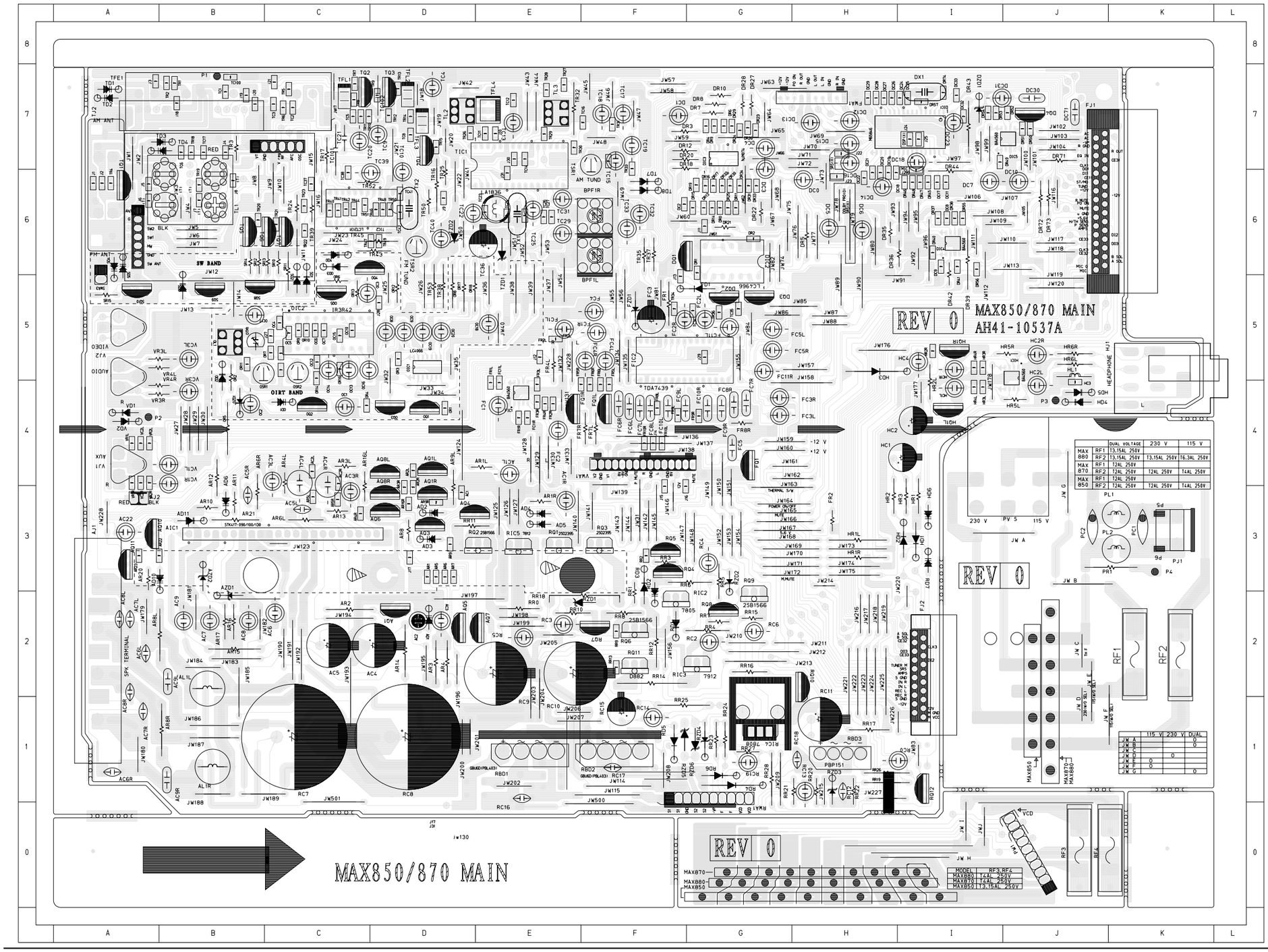
9-6 Digital Signal Processor(KS9286) : NIC9286

No.	Port	Port	Description
1	AVDD1	-	Analog VCC1
2	DPDO	O	Charge pump output for Digital PLL
3	DPFIN	I	Filter input for Digital PLL
4	DPFOUT	O	Filter output for Digital PLL
5	CNTVOL	I	VCO control voltage for Digital PLL
6	AVSS1	-	Analog Ground1
7	DATX	O	Digital Audio output data
8	XIN	I	X'tal oscillator input
9	XOUT	O	X'tal oscillator output
10	WDCHO	O	Word clock output of 48 bit/Slot (88.2KHz)
11	LRCHO	O	Channel clock output of 48 bit/Slot (44.1KHz), 88.2KHz when ESP ON
12	ADATAO	O	Serial audio data output of 48 bit/Slot (MSB first), double speed output when ESP ON
13	DVSS1	-	Digital Ground1
14	BCKO	O	Audio data bit clock output of 48 bit/Slot(2.1168MHz), 4.2336MHz when ESP ON
15	C2PO	O	C2 Pointer for output audio data
16	VREFL2	I	Input terminal2 of reference voltage "L"(Floating)
17	VREFL1	I	Input terminal2 of reference voltage "L"(GND connection
18	AVDD2	-	Analog VCC2
19	RCHOUT	O	Right-Channel audio output through D/A converter
20	LCHOUT	O	Left-Channel audio output through D/A converter
21	AVSS2	-	Analog ground2
22	VREFH1	I	Input terminal1 of reference voltage "H" (VDD connection)
23	VREFH2	I	Input terminal2 of reference voltage "H" (Floating)
24	EMPH	O	Emphasis/Non-Emphasis output, H: Emphasis ON, L: Emphasis OFF
25	LKFS	O	The Lock Status output of frame sync
26	S0S1	O	Output of subcode sync signal(S0+S1)
27	RESET	I	System reset at "L"
28	/ESP	I	ESP function ON/OFF control("L": ESP function ON, "H": ESP function OFF)
29	SQCK	I	Clock for output Subcode-Q data
30	SQDT	O	Serial output of Subcode-Q data
31	SQOK	O	The CRC (Cycle Redundancy Check) check result signal output of Subcode-Q)
32	SBCK	I	Clock for output subcode data
33	SDAT	O	Subcode serial data output
34	DVDD1	-	Digital VDD1
35	MUTE	I	Mute control input ("H": Mute ON)
36	MLT	I	Latch Signal input from Micom (Schmit Trigger)
37	MDAT	I	Latch Signal input from Micom (Schmit Trigger)
38	MCK	I	Latch Signal input from Micom (Schmit Trigger)
39	DB8	I/O	SRAM data I/O port8 (MSB)
40	DB7	I/O	SRAM data I/O port7

No.	Port	Port	Description
41	DB6	I/O	SARM data I/O port 6
42	DB5	I/O	SARM data I/O port 5
43	DB4	I/O	SARM data I/O port 4
44	DB3	I/O	SARM data I/O port 3
45	DB2	I/O	SARM data I/O port 2
46	DB1	I/O	SARM data I/O port 1 (LSB)
47	C1F1	I/O	Monitoring output for C1 error correction (RA1)
48	C1F2	I/O	Monitoring output for C1 error correction (RA2)
49	C2F1	I/O	Monitoring output for C2 error correction (RA3)
50	C2F2	I/O	Monitoring output for C21 error correction (RA4)
51	C2FL	I/O	C2 decoder flag (RA5, “H” : When the processing C2 code is impossible correction status.)
52	/PBCK	I/O	Output of VCO/2 (4.3218MHz) (RA6)
53	DVSS2	I/O	Digital ground2
54	FSDW	I/O	Window or unprotected frame sync (RA7)
55	ULKFS	I/O	Frame sync protection state (RA8)
56	/JIT	I/O	Display of either RAM overflow or underflow for ±4 frame jitter margin (RA9)
57	C4M	I/O	Only monitoring signal (4.2336MHz) (RA10)
58	C16M	I/O	16.9344MHz signal output (RA11)
59	/WE	I/O	Terminal for test
60	/CS	I/O	Terminal for test
61	XTALSEL	I	Mode Selection1 (H: 33.8688MHz, L:16.9344MHz)
62	TEST0	I	TEST input terminal (GND connection)
63	CDROM	I	Mode Selection2 (H: CD-ROM, L: CDP)
64	SRAM	I	TEST input terminal (GND connection)
65	TEST1	I	TEST input terminal (GND connection)
66	EFMI	I	EFM signal input
67	ADATAI	I	Serial audio data input of 48 bit/Slot (MSB first)
68	/ISTAT	O	The internal status output
69	TRCNT	I	Tracking counter input signal
70	LOCK	O	Output signal of LKFS condition sampled PBFR/16 (if LKFS is “H”, LOCK is “H”, if LKFS is sampled “L” at least 8 times by PBFR/16, LOCK is “L”)
71	PBFR	O	Write frame clock (Lock: 7.35KHz)
72	SMEF	O	LPF time constant control of the spindle servo error signal
73	SMON	O	ON/OFF control signal for spindle servo
74	DVDD2	-	Digital VDD2
75	SMDP	O	Spindle Motor drive (Rough control in the SPEED mode, Phase control in the PHASE mode)
76	SMSD	O	Spindle Motor drive (Velocity control in the PHASE mode)
77	BCKI	I	Audio data bit clock input of 48 bit/Slot (2.1168MHz)
78	TESTV	I	TEST input terminal (GND connection)
79	DSPEED	I	TEST input terminal (VDD connection)
80	LRCHI	I	Channel clock input of 48 bit/Slot (44.1KHz)

10. PCB Diagrams

10-1 Main



*** RESISTOR ***

AR10 (B3)
AR11 (B3)
AR12 (B3)
AR13 (C3)
AR16 (B2)
AR16L (C3)
AR17 (B2)
AR1L (D4)
AR1R (E3)
AR2 (C2)
AR20 (A3)
AR21 (B3)
AR3L (C4)
AR4L (C3)
AR6L (C3)
AR6R (B3)
AR8 (D3)
AR9L (D3)
DR10 (G7)
DR12 (F7)
DR18 (F7)
DR20 (F7)
DR21 (G6)
DR22 (G6)
DR27 (G7)
DR28 (G7)
DR3 (F7)
DR35 (H6)
DR36 (I6)
DR39 (I5)
DR42 (I5)
DR44 (I6)
DR5 (H6)
DR7 (G7)
DR71 (J7)
DR72 (J6)
DR73 (J6)
DR8 (G7)
DX1 (I7)
FR1 (F5)
FR2 (H3)
FR4L (E4)
FR7L (F4)
FR7R (F4)
FR8R (G4)
HR1 (I3)
HR1L (H3)
HR1R (H3)
HR2 (H3)
HR2L (I4)
HR3 (I3)
HR5L (J4)
HR5R (I5)
HR6L (J5)
HR6R (J5)
OR12 (D5)
OR13 (C5)
OR17 (D5)
OR18 (D5)
OR2 (B4)
OR5 (B4)
OR6 (C5)
OR8 (D5)
PR1 (J3)
RR0 (E2)
RR1 (F2)
RR10 (E2)
RR11 (D3)
RR12 (F2)
RR15 (G2)
RR16 (G2)
RR17 (H1)
RR18 (E2)
RR19 (H1)
RR20 (H0)
RR21 (H0)
RR22 (H0)
RR23 (G1)
RR24 (G1)
RR26 (H1)
RR27 (G1)
RR28 (G0)
RR3 (F3)
RR4 (F2)
RR5 (G2)
RR6 (F3)
RR7 (G2)
RR8 (F2)
SR10 (C6)
SR11 (C5)
SR12 (B6)
SR13 (C6)
SR14 (B6)
SR15 (A5)
TR16 (D6)
TR17 (C6)
TR24 (C6)
TR25 (D6)
TR3 (B7)
TR32 (E7)
TR35 (F6)
TR37 (F6)
TR38 (D5)
TR39 (C6)
TR43 (C6)
TR45 (C6)
TR50 (D6)
TR52 (C6)
TR53 (D5)
TX1 (E6)
TX2 (D6)
VR3L (A5)
VR3R (A4)
VR4L (A5)
VR4R (A4)

*** CONDENSER ***

AC1L (E4)
AC1R (E3)
AC2 (D2)
AC22 (A3)
AC3 (D2)
AC3L (C4)
AC3R (C4)
AC4L (C4)
AC4R (C4)
AC5L (C3)
AC5R (B3)
AC6 (C2)
AC6L (A2)
AC6R (A1)
AC7 (B2)
AC7L (A2)
AC7R (A1)
AC8 (B2)
AC8L (A2)
AC8R (A1)
AC9 (B2)
AC9L (B2)
AC9R (B1)
DC0 (H6)
DC1 (G7)
DC10 (J6)
DC12 (H7)
DC13 (H7)
DC14 (H6)
DC15 (H7)
DC16 (H7)
DC18 (I7)
DC23 (I7)
DC3 (G7)
DC30 (J7)
DC31 (J7)
DC4 (G7)
DC5 (H6)
DC6 (H6)
DC7 (I6)
DC71 (J7)
FC1 (E4)
FC10L (F4)
FC10R (G4)
FC11L (G5)
FC11R (G5)
FC1L (E5)
FC1R (F5)
FC2 (E4)
FC2L (G5)
FC2R (F5)
FC3L (G4)
FC3R (G4)
FC4 (F5)
FC4L (F5)
FC4R (F5)
FC5 (G4)
FC5L (G5)
FC5R (G5)
FC6L (F4)
FC6R (F4)
FC7L (F4)
FC7R (G4)
FC8L (F4)
FC8R (G4)
FC9L (F4)
FC9R (G4)
HC1L (I4)
HC1R (I5)
HC2L (J4)
HC2R (J5)
HC4 (I5)
OC1 (C4)
OC13 (C5)
OC14 (C5)
OC16 (C5)
OC17 (B5)
OC18 (E5)
OC19 (D5)
OC2 (B4)
OC20 (D5)
OC3 (C5)
OC8 (D5)
OC9 (D5)
PC1 (K3)
PC2 (J3)
RC0 (I1)
RC12 (H1)
RC13 (H1)
RC14 (F1)
RC16 (E1)
RC17 (F1)
RC18 (H1)
RC19 (G1)
RC2 (G2)
RC3 (E2)
RC4 (G3)
RC5 (E2)
RC6 (G2)
TC10 (D7)
TC101 (C6)
TC102 (D7)
TC13 (E7)
TC15 (F7)
TC17 (F7)
TC18 (F7)
TC19 (F7)
TC20 (C7)
TC21 (C7)
TC22 (D6)
TC25 (E6)
TC29 (E6)
TC31 (E6)
TC32 (F6)
TC33 (F6)
TC39 (D6)
TC4 (D7)
TC40 (D6)
TC9 (D7)
VC1L (B4)
VC1R (B4)
VC3L (B5)
VC3R (B4)

*** DIODE ***

AD1 (D2)
AD10 (B3)
AD11 (B3)
AD2 (D3)
AD3 (D3)
AD4 (E3)
AD5 (E3)
AD6 (B3)
AZD1 (B2)
AZD2 (B3)
DZD1 (I7)
FD1 (F5)
FZD1 (F5)
HD1 (I3)
HD2 (I3)
HD3 (I5)
HD4 (J4)
HD5 (J4)
HD6 (I3)
OD1 (C4)
OD2 (B5)
OD3 (C6)
OD4 (C6)
OZD1 (B4)
RD1 (F2)
RD2 (F2)
RD3 (F3)
RD4 (G1)
RD5 (F1)
RD6 (G1)
RD7 (I3)
RZD2 (G2)
RZD3 (H1)
RZD4 (G1)
SD1 (C6)
SD2 (C6)
SD3 (B6)
SD4 (A5)
SD5 (A6)
TD1 (A7)
TD2 (A7)
TD3 (B7)
TD4 (A7)
TD7 (F6)
TD8 (F6)
VD1 (A4)
VD2 (A4)

*** TR ***

AQ1 (D2)
AQ10 (A3)
AQ11 (A3)
AQ1L (D4)
AQ1R (D3)
AQ3 (D3)
AQ4 (D3)
AQ5 (D2)
AQ6 (D3)
AQ7 (E2)
AQ8L (D4)
AQ8R (D3)
DQ1 (G6)
DQ2 (G5)
DQ3 (G5)
DQ4 (J7)
FQ1 (G4)
FQ1L (F4)
FQ1R (E4)
HQ1L (I4)
HQ1R (I5)
OQ1 (D4)
OQ2 (C4)
OQ3 (D4)
OQ4 (C6)
OQ5 (C5)
RQ10 (H2)
RQ12 (I1)
RQ4 (F3)
RQ5 (F3)
RQ7 (F2)
RQ8 (G2)
SQ10 (A5)
SQ8 (C5)
SQ9 (B5)
TQ1 (A6)
TQ2 (C7)
TQ3 (D7)
TQ4 (D7)
TQ5 (B6)
TQ6 (C6)
TQ7 (C6)

*** IC&WAFER ***

AJ2 (A3)
FWA1 (H7)
HJ1 (K5)
PJ1 (K3)
VWA1 (G4)

*** CHIP ***

AC1 (D3)
AC2L (C4)
AC2R (C4)
AR1 (D3)
AR16R (D3)
AR22 (B3)
AR23 (A3)
AR2L (D4)
AR2R (D3)
AR3R (D3)
AR4R (C3)
AR5 (D3)
AR5L (C3)
AR5R (C3)
AR6 (D3)
AR7 (D3)
AR9 (D3)
AR9R (D3)
DC11 (I6)
DC17 (I6)
DC18 (H6)
DC19 (H6)
DC2 (F6)
DC20 (H6)
DC21 (H6)
DC22 (H6)
DC24 (I7)
DC25 (I7)
DC26 (H7)
DC27 (H7)
DC28 (H7)
DC29 (H7)
DC32 (I7)
DC33 (I7)
DC8 (I6)
DC9 (I6)
DIC1 (I7)
DIC3 (G7)
DIC4 (I6)
DIC5 (J7)
DR0 (G6)
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DR11 (G6)
DR13 (G6)
DR14 (G6)
DR15 (G6)
DR16 (G6)
DR17 (G6)
DR19 (G6)
DR2 (G6)
DR23 (G7)
DR24 (G7)
DR25 (G6)
DR26 (G7)
DR29 (G7)
DR30 (G6)
DR31 (G6)
DR32 (G6)
DR33 (G6)
DR34 (G6)
DR37 (I6)
DR38 (I6)
DR4 (G7)
DR40 (I6)
DR41 (I6)
DR45 (I6)
DR46 (I6)
DR47 (I6)
DR48 (I6)
DR49 (I7)
DR50 (J7)
DR51 (J7)
DR52 (J7)
DR53 (I7)
DR54 (I7)
DR55 (I6)
DR56 (I6)
DR57 (I7)
DR6 (G7)
DR74 (I7)
DR9 (G7)
FC11L (E4)
FC11R (E4)
FIC1 (E4)
FR10L (F4)
FR10R (F4)
FR1L (E4)
FR1R (E4)
FR2L (E5)
FR2R (E4)
FR3L (E4)
FR3R (E4)
FR4R (E4)
FR5L (F4)
FR5R (F4)
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FR8L (F4)
FR9L (F4)
FR9R (G4)
HC3 (J4)
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HR3L (I4)
HR3R (I5)
HR4L (I4)
HR4R (I5)
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J13 (F5)
J14 (F4)
J15 (F3)
J16 (F3)
J17 (D3)
J2 (A6)
J22 (H7)
J23 (H6)
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J25 (I7)
J27 (C5)
J28 (D5)
J280 (I6)
J29 (G5)
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J4 (B7)
J5 (A6)
J6 (A6)
J7 (B6)
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J9 (D6)
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OC7 (C5)
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OR1 (D4)
OR10 (C5)
OR11 (B5)
OR14 (C5)
OR16 (C5)
OR3 (D5)
OR4 (C4)
OR7 (C5)
OR9 (C5)
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RR9 (F2)
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TC11 (E7)
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TC14 (E7)
TC16 (F7)
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TC2 (C7)
TC23 (E6)
TC24 (E6)
TC26 (E6)
TC27 (E6)
TC28 (F6)
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TC42 (D6)
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TC6 (B7)
TC8 (D7)
TR1 (B7)
TR10 (C7)
TR11 (C7)
TR12 (D7)
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TR14 (D7)
TR15 (D7)
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TR19 (B6)
TR2 (B7)
TR20 (B6)
TR21 (C6)
TR22 (C6)
TR23 (C6)
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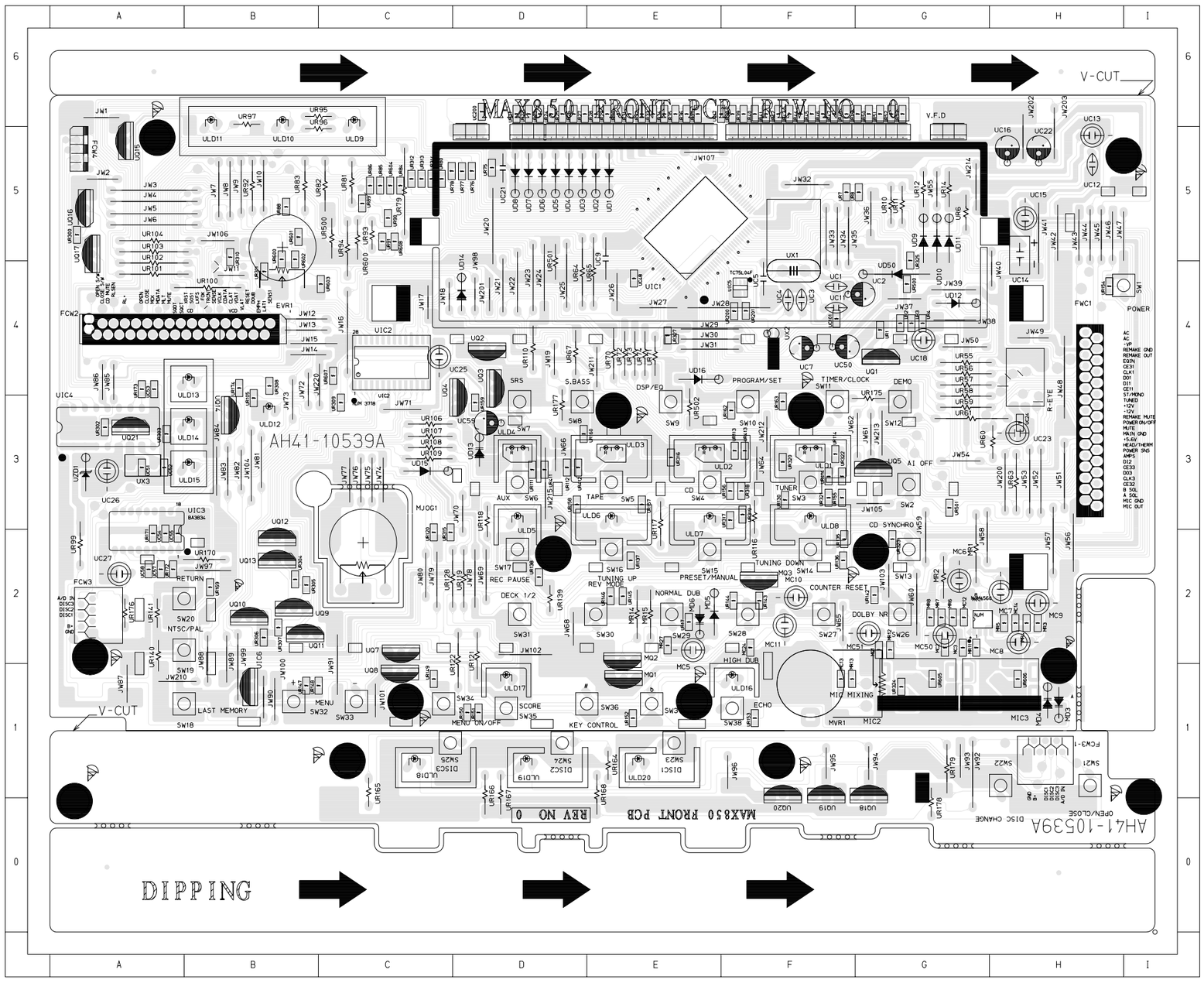
TR27 (E7)
TR28 (E7)
TR29 (E7)
TR30 (E7)
TR31 (F7)
TR33 (F7)
TR34 (F5)
TR36 (G5)
TR4 (A6)
TR40 (C6)
TR41 (C6)
TR42 (C6)
TR44 (C6)
TR46 (D6)
TR47 (D6)
TR48 (D6)
TR49 (D6)
TR5 (C7)
TR50 (D6)
TR51 (C6)
TR6 (C7)
TR7 (C7)
TR8 (C7)
TR9 (D7)
VC2L (A4)
VC2R (A4)
VR1L (A4)
VR1R (A4)
VR2L (A4)
VR2R (A4)
j18 (B7)
j19 (B7)
j20 (B7)
j21 (C7)

10-2 Front



*** RESISTOR ***

MR1 (G2)
MR14 (E2)
MR15 (E2)
MR2 (G2)
UR10 (G5)
UR100 (A4)
UR101 (A4)
UR102 (A4)
UR103 (A5)
UR104 (A5)
UR106 (C3)
UR107 (C3)
UR108 (C3)
UR109 (C3)
UR11 (G5)
UR110 (D4)
UR116 (F2)
UR117 (E2)
UR118 (D2)
UR119 (D2)
UR12 (G5)
UR121 (D1)
UR122 (D1)
UR128 (D2)
UR139 (D2)
UR14 (G5)
UR140 (A1)
UR141 (A2)
UR164 (E1)
UR165 (C0)
UR166 (D0)
UR167 (D0)
UR168 (E0)
UR170 (B2)
UR175 (G3)
UR176 (A2)
UR177 (D3)
UR178 (G0)
UR179 (G1)
UR500 (C5)
UR501 (D4)
UR502 (E3)
UR55 (G4)
UR56 (G4)
UR57 (G4)
UR58 (G3)
UR59 (G3)
UR6 (G5)
UR60 (H3)
UR600 (C5)
UR61 (G3)
UR63 (H3)
UR64 (D4)
UR65 (E4)
UR67 (D4)
UR70 (E4)
UR71 (E4)
UR72 (E4)
UR73 (E4)
UR74 (E4)
UR79 (C5)
UR81 (C5)
UR82 (C5)
UR83 (B5)
UR92 (B5)
UR93 (C5)
UR94 (C4)
UR95 (B6)
UR96 (B5)
UR97 (B6)
UR99 (A2)
UX1 (F4)
UX2 (F4)

*** CONDENSER ***

MC10 (F2)
MC11 (F2)
MC5 (E2)
MC50 (G2)
MC51 (G2)
MC6 (G2)
MC7 (H2)
MC8 (H2)
MC9 (H2)
UC1 (F4)
UC11 (F4)
UC12 (H5)
UC13 (H5)
UC14 (H5)
UC15 (H5)
UC16 (H5)
UC18 (G4)
UC2 (G4)
UC21 (D5)
UC22 (H5)
UC23 (H3)
UC25 (C4)
UC26 (A3)
UC27 (A2)
UC3 (F4)
UC4 (F4)
UC5 (F4)
UC50 (F4)
UC59 (D3)
UC7 (F4)
UC9 (E4)

*** DIODE ***

MD3 (H1)
MD4 (H1)
MD5 (E2)
MD6 (E2)
UD1 (E5)
UD10 (G5)
UD11 (G5)
UD12 (G4)
UD13 (D3)
UD14 (D4)
UD15 (C3)
UD16 (E4)
UD2 (E5)
UD3 (D5)
UD4 (D5)
UD5 (D5)
UD50 (G4)
UD6 (D5)
UD7 (D5)
UD8 (D5)
UD9 (G5)
UZD1 (A3)

*** TR ***

MQ1 (E1)
MQ2 (E2)
MQ3 (F2)
UIC6 (B1)
UQ1 (G4)
UQ10 (B2)
UQ11 (B2)
UQ12 (B2)
UQ13 (B2)
UQ14 (B3)
UQ15 (A5)
UQ16 (A5)
UQ17 (A4)
UQ18 (G1)
UQ19 (F1)
UQ2 (D4)
UQ20 (F1)
UQ21 (A3)
UQ3 (D4)
UQ4 (D4)
UQ5 (G3)
UQ7 (C2)
UQ8 (C1)
UQ9 (B2)

*** IC&WAFER ***

FCW4 (A5)

*** CHIP ***

MC1 (G2)
MC12 (G2)
MC13 (F1)
MC14 (H2)
MC2 (G2)
MC24 (F2)
MC3 (G2)
MIC1 (G2)
MR11 (G2)
MR12 (G2)
MR13 (F1)
MR27 (E2)
MR3 (H2)
MR4 (H2)
MR5 (H2)
MR6 (G2)
MR7 (G2)
MR8 (G2)
UC101 (F4)
UC17 (F6)
UC200 (D6)
UC24 (H3)
UC48 (E4)
UC51 (A3)
UC52 (A3)
UC53 (A4)
UC54 (A2)
UC55 (A2)
UC57 (A2)
UC58 (A2)
UIC2 (C4)
UIC5 (F4)
UR1 (G4)
UR105 (B3)
UR111 (D3)
UR112 (D3)
UR113 (F3)
UR114 (F3)
UR120 (C2)
UR130 (F3)
UR135 (F2)
UR136 (F2)
UR137 (E2)
UR138 (D2)
UR142 (G2)
UR143 (F2)
UR144 (F2)
UR145 (E2)
UR146 (E2)
UR147 (B1)
UR148 (C1)
UR149 (C1)
UR150 (D1)
UR151 (D1)
UR152 (E1)
UR153 (F1)
UR154 (H4)
UR155 (F3)
UR156 (F3)
UR157 (E3)
UR158 (D3)
UR159 (D3)
UR160 (D3)
UR162 (F3)
UR163 (F3)
UR169 (B2)
UR17 (E2)
UR171 (A2)
UR172 (A2)
UR173 (A4)
UR174 (B4)
UR2 (G4)
UR200 (F4)
UR201 (F4)
UR21 (D6)
UR22 (D6)
UR23 (D6)
UR24 (D6)
UR25 (D6)
UR26 (D6)
UR27 (D6)
UR28 (E6)
UR29 (E6)
UR3 (G4)
UR30 (E6)
UR300 (A5)
UR302 (A3)
UR303 (A3)
UR304 (B2)
UR305 (B2)
UR306 (B2)
UR307 (B2)
UR308 (B4)
UR309 (C3)
UR31 (E6)
UR310 (B5)
UR311 (B4)
UR312 (C5)
UR313 (C5)
UR314 (C5)
UR315 (C2)
UR316 (E3)
UR317 (F3)
UR318 (F3)
UR319 (F3)
UR32 (E6)
UR320 (F3)
UR321 (F3)
UR322 (F3)
UR323 (G2)
UR324 (G1)
UR325 (G5)
UR327 (E4)
UR33 (E6)
UR34 (E6)
UR35 (E6)
UR36 (E6)
UR37 (E6)
UR38 (F6)
UR39 (F6)
UR4 (G4)
UR40 (F6)
UR41 (F6)
UR411 (D3)
UR412 (D3)
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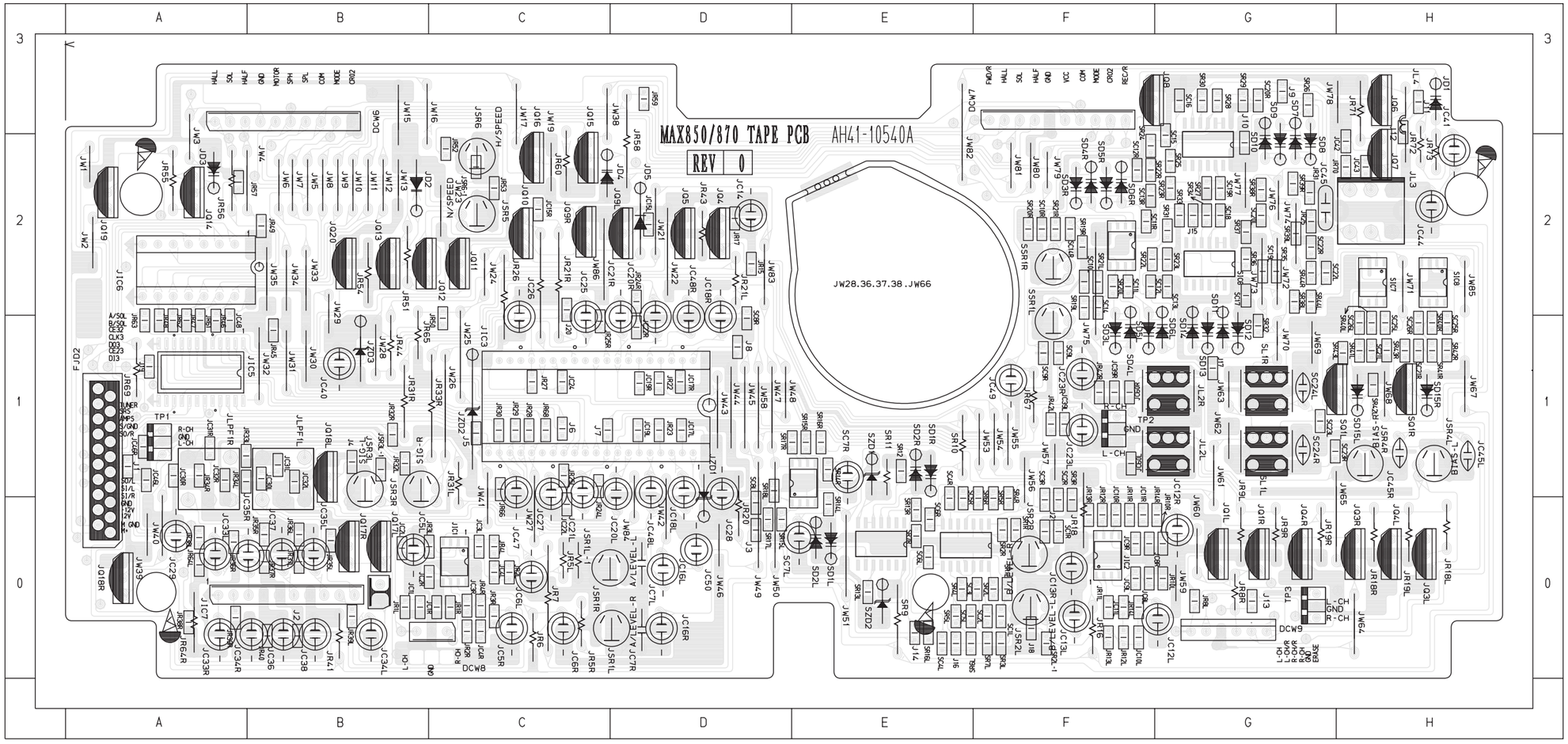
UR414 (F3)
UR42 (F6)
UR43 (F6)
UR44 (F6)
UR45 (F6)
UR46 (F6)
UR47 (F6)
UR48 (F6)
UR49 (G6)
UR50 (G6)
UR500 (G4)
UR501 (G3)
UR51 (G6)
UR52 (G6)
UR53 (G6)
UR600 (B5)
UR601 (B5)
UR602 (B5)
UR603 (C4)
UR604 (C5)
UR605 (G1)
UR606 (H1)
UR607 (C4)
UR608 (C5)
UR7 (F5)
UR75 (D5)
UR76 (D5)
UR77 (D5)
UR78 (C5)
UR8 (G5)
UR80 (C5)
UR84 (C5)
UR85 (C5)
UR86 (C5)
UR88 (B5)
UR89 (C5)
UR90 (C5)
UR91 (C5)

10-3 Deck



*** RESISTOR ***

JR16 (F0)	JR9L (G0)	
JR18 (F0)	JR9R (G0)	
JR18L (H0)	JSR1L-1 (C0)	
JR18R (H0)	SR10 (E1)	
JR19L (H0)	SR11 (E1)	
JR19R (G0)	SR9 (E0)	
JR20 (D0)		
JR21L (D2)		
JR21R (C1)		
JR26 (C1)		
JR31L (C0)		
JR31R (B1)		
JR33R (C1)		
JR41 (B0)		
JR43 (D2)		
JR44 (B1)		
JR51 (B2)		
JR54 (B2)		
JR55 (A2)		
JR56 (A2)		
JR58 (D2)		
JR5L (C0)		
JR5R (C0)		
JR6 (C0)		
JR60 (C2)		
JR64R (A0)		
JR65 (B1)		
JR67 (F1)		
JR69 (A1)		
JR7 (C0)		
JR71 (H2)		
JR72 (H2)		
JR73 (H2)		
JR8R (G0)		

*** CONDENSER ***

JC12L (G0)	JC47 (C1)
JC12R (G0)	JC48L (D1)
JC13L (F0)	JC48R (D1)
JC13R (F0)	JC49 (F1)
JC14 (D2)	JC50 (D0)
JC16L (D0)	JC5L (B0)
JC16R (D0)	JC5R (C0)
JC18L (D1)	JC6L (C0)
JC18R (D1)	JC6R (C0)
JC20L (D0)	JC7L (D0)
JC20R (D1)	JC7R (D0)
JC21L (C1)	SC24L (G1)
JC23L (F1)	SC24R (G1)
JC23R (F1)	SC7L (E0)
JC25 (C2)	SC7R (E1)
JC26 (C1)	
JC27 (C1)	
JC28 (D0)	
JC29 (A0)	
JC33L (A0)	
JC33R (A0)	
JC34L (B0)	
JC34R (B0)	
JC35L (B0)	
JC35R (B0)	
JC36 (B0)	
JC37 (B0)	
JC38 (B0)	
JC40 (B1)	
JC41 (H2)	
JC44 (H2)	
JC45 (G2)	
JC45L (H1)	
JC45R (H1)	

*** DIODE ***

JD1 (H3)	
JD2 (B2)	
JD3 (A2)	
JD4 (C2)	
JD5 (D2)	
JZD1 (D0)	
JZD2 (C1)	
JZD3 (B1)	
SD10 (G3)	
SD11 (G2)	
SD12 (G1)	
SD13 (G1)	
SD14 (G2)	
SD15L (H1)	
SD15R (H1)	
SD1L (E0)	
SD1R (E1)	
SD2L (E0)	
SD2R (E1)	
SD3L (F1)	
SD3R (F2)	
SD4L (F2)	
SD4R (F2)	
SD5L (F1)	
SD5R (F2)	
SD6L (G2)	
SD6R (F2)	
SD7 (G3)	
SD8 (G2)	
SD9 (G2)	
SZD1 (E1)	
SZD2 (E0)	

*** TR *** *** IC&WAFER ***

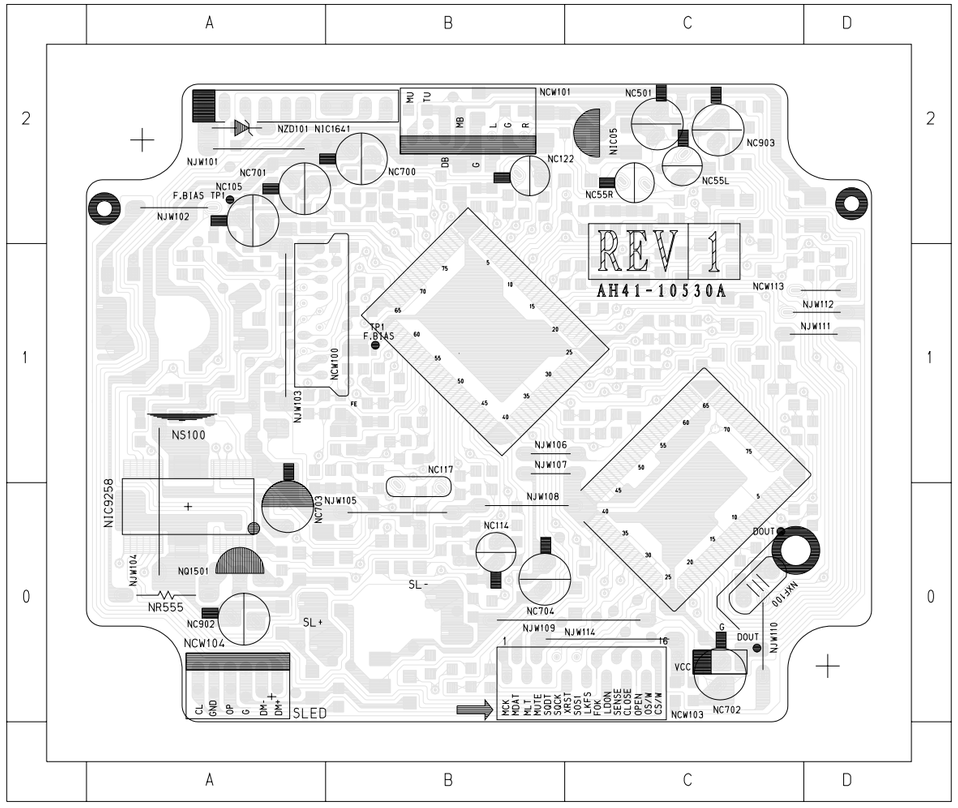
JQ10 (C2)	DCW6 (A3)
JQ11 (C2)	DCW7 (F3)
JQ12 (B2)	DCW8 (C0)
JQ13 (B2)	DCW9 (G0)
JQ14 (A2)	FJD2 (A0)
JQ15 (C2)	J1C3 (D1)
JQ16 (C2)	J1C6 (B2)
JQ17L (B0)	J1C7 (A0)
JQ17R (B0)	TP1 (A1)
JQ18L (B1)	TP2 (F1)
JQ18R (A0)	TP3 (G0)
JQ19 (A2)	
JQ1L (G0)	
JQ1R (G0)	
JQ20 (B2)	
JQ3L (H0)	
JQ3R (H0)	
JQ4 (D2)	
JQ4L (H0)	
JQ4R (G0)	
JQ5 (D2)	
JQ6 (H3)	
JQ7 (H2)	
JQ8 (F3)	
JQ9L (D2)	
JQ9R (C2)	
SQ1L (H1)	
SQ1R (H1)	

*** CHIP ***

J1 (A1)	JC22R (D1)	JR12L (F0)	JR37R (B0)	SC10R (F2)	SC4R (E0)	SR23L (G2)	SR4L (E0)
J10 (G2)	JC24 (C1)	JR12R (F0)	JR38L (A0)	SC11L (F2)	SC5L (E0)	SR23R (G2)	SR4R (F0)
J11 (H3)	JC2L (B0)	JR13L (F0)	JR38R (A0)	SC11R (F2)	SC5R (E0)	SR24 (F2)	SR5L (E0)
J12 (H3)	JC2R (C0)	JR13R (F0)	JR39L (B0)	SC12L (F2)	SC6L (E0)	SR25 (G2)	SR5R (F0)
J13 (G0)	JC30L (B1)	JR14L (F0)	JR39R (A0)	SC12R (F2)	SC6R (E0)	SR26 (G3)	SR6L (E0)
J14 (E0)	JC30R (A1)	JR14R (G0)	JR3L (C0)	SC13L (G2)	SC8L (D0)	SR27 (G2)	SR6R (F0)
J15 (G2)	JC31L (B1)	JR15 (D2)	JR3R (C0)	SC13R (F2)	SC8R (D1)	SR28 (G3)	SR7L (F0)
J16 (E0)	JC31R (A1)	JR17 (D2)	JR40 (B0)	SC14 (F2)	SC9L (F1)	SR29 (G3)	SR7R (E0)
J17 (G1)	JC32L (B1)	JR1L (B0)	JR42L (F1)	SC14R (F2)	SC9R (F1)	SR2L (F0)	
J18 (F0)	JC32R (A1)	JR1R (C0)	JR42R (F1)	SC15 (G2)	SIC6 (G2)	SR2R (F0)	
J19 (A1)	JC39L (F1)	JR22 (D1)	JR45 (B1)	SC16 (G3)	SIC7 (H2)	SR30 (G3)	
J2 (B0)	JC39R (F1)	JR23 (D1)	JR46 (A1)	SC17 (G2)	SIC8 (H2)	SR31 (G2)	
J20 (C2)	JC3L (C0)	JR24L (C1)	JR47 (A1)	SC18 (G2)	SR12 (E1)	SR32 (G1)	
J21 (F0)	JC3R (C0)	JR24R (D2)	JR48 (A1)	SC19L (G2)	SR13L (E0)	SR33 (G2)	
J3 (D0)	JC42 (H2)	JR25 (G2)	JR49 (B2)	SC19R (G2)	SR13R (E0)	SR34 (G2)	
J4 (B1)	JC43 (H2)	JR25L (C1)	JR4L (C0)	SC1L (F0)	SR14L (E0)	SR35 (G2)	
J5 (C1)	JC46L (A1)	JR25R (C1)	JR4R (C0)	SC1R (F0)	SR14R (E1)	SR36 (G2)	
J6 (C1)	JC46R (A1)	JR27 (C1)	JR50 (C1)	SC20L (G2)	SR15L (D0)	SR37 (G2)	
J7 (C1)	JC48 (A1)	JR28 (C1)	JR52 (C2)	SC20R (G3)	SR15R (E1)	SR38L (G2)	
J8 (D1)	JC4L (C0)	JR29 (C1)	JR53 (C2)	SC21L (H1)	SR16L (E0)	SR38R (G2)	
J9 (G3)	JC4R (C0)	JR2L (C0)	JR57 (A2)	SC21R (H1)	SR16R (E1)	SR39L (G2)	
JC10L (F0)	JC60L (F1)	JR2R (C0)	JR59 (D3)	SC22L (G2)	SR17L (D0)	SR39R (G2)	
JC10R (F0)	JC60R (F1)	JR30 (C1)	JR61 (A1)	SC22R (G2)	SR17R (E1)	SR3L (F0)	
JC11L (F0)	JC8L (F0)	JR31 (G2)	JR62 (A1)	SC23L (G1)	SR18L (D1)	SR3R (F0)	
JC11R (F0)	JC8R (F0)	JR32L (B1)	JR63 (A1)	SC23R (G1)	SR19L (F2)	SR40L (H1)	
JC15L (D2)	JC9L (F0)	JR32R (B1)	JR64L (A0)	SC25L (H1)	SR19R (F2)	SR40R (H1)	
JC15R (C2)	JC9R (F0)	JR33L (A1)	JR66 (C1)	SC25R (H1)	SR1L (F0)	SR41L (H1)	
JC17L (D1)	JIC1 (C0)	JR34L (A1)	JR68 (C1)	SC26L (H1)	SR1R (F0)	SR41R (H1)	
JC17R (D1)	JIC2 (F0)	JR34R (A1)	JR70 (H2)	SC26R (H1)	SR20L (F2)	SR42L (H1)	
JC19L (D1)	JIC5 (A1)	JR35L (B0)	JR8L (G0)	SC2L (F0)	SR20R (F2)	SR42R (H1)	
JC19R (D1)	JR10L (G0)	JR35R (B0)	JSR2L-1 (F0)	SC2R (F0)	SR21L (F2)	SR43L (H1)	
JC1L (B0)	JR10R (G0)	JR36L (B0)	JSR3L-1 (B1)	SC3L (F0)	SR21R (F2)	SR43R (H1)	
JC1R (C0)	JR11L (F0)	JR36R (A0)	JSR6-1 (C2)	SC3R (F0)	SR22L (F2)	SR44L (G2)	
JC22L (C0)	JR11R (F0)	JR37L (B0)	SC10L (F2)	SC4L (E0)	SR22R (F2)	SR44R (G2)	

10-4 CD

10-4-1 Main



*** CHIP ***

IC9223 (B1)	NC201 (C0)	ND200 (C2)	NJR138 (A1)	NJR308 (B2)	NR119 (C1)	NR603 (B1)
IC9258 (A0)	NC202 (C0)	ND201 (C2)	NJR139 (A1)	NJW320 (B2)	NR120 (B2)	NR604 (B1)
IC9286 (B0)	NC203 (C0)	NJR102 (B2)	NJR140 (A1)	NL100 (B0)	NR121 (B2)	NR606 (B0)
NC100 (B2)	NC204 (C1)	NJR103 (A2)	NJR141 (A1)	NL300 (D2)	NR200 (C1)	NR804 (B0)
NC101 (B2)	NC205 (C1)	NJR104 (A2)	NJR142 (A1)	NL301 (C2)	NR201 (C0)	
NC102 (B2)	NC300 (C2)	NJR105 (C1)	NJR143 (A0)	NL302 (B2)	NR202 (C1)	
NC103 (B2)	NC301 (B2)	NJR106 (C1)	NJR144 (A0)	NL303 (A0)	NR203 (C1)	
NC104 (A1)	NC400 (C2)	NJR107 (C1)	NJR145 (B0)	NQ1502 (A1)	NR204 (C1)	
NC106 (B2)	NC500 (A2)	NJR108 (C1)	NJR146 (A0)	NR100 (B2)	NR300 (C1)	
NC107 (B1)	NC502 (C2)	NJR110 (B0)	NJR147 (A0)	NR101 (A1)	NR400 (B0)	
NC108 (B1)	NC50L (C1)	NJR111 (B0)	NJR148 (B0)	NR102 (A1)	NR401 (B1)	
NC110 (B1)	NC50R (C1)	NJR112 (B0)	NJR149 (B0)	NR103 (B1)	NR50L (C1)	
NC111 (B1)	NC52L (C1)	NJR113 (B0)	NJR150 (B0)	NR103 (B1)	NR50R (C2)	
NC112 (B1)	NC52R (C2)	NJR114 (B0)	NJR151 (C0)	NR104 (B0)	NR52L (C1)	
NC113 (B1)	NC53L (C1)	NJR115 (B0)	NJR152 (C0)	NR105 (B0)	NR52R (C2)	
NC115 (B0)	NC53R (C2)	NJR116 (A1)	NJR153 (C0)	NR106 (B0)	NR53L (C1)	
NC116 (B0)	NC54L (D1)	NJR117 (A1)	NJR154 (C1)	NR107 (B1)	NR53R (C2)	
NC117 (B2)	NC54R (C1)	NJR118 (B1)	NJR155 (C1)	NR108 (B1)	NR54L (C1)	
NC118 (B0)	NC602 (B0)	NJR127 (C2)	NJR156 (C1)	NR109 (B1)	NR54R (C2)	
NC119 (B1)	NC603 (B1)	NJR129 (C2)	NJR300 (C1)	NR111 (B0)	NR55L (C1)	
NC120 (C1)	NC800 (B0)	NJR131 (B2)	NJR301 (C2)	NR112 (B0)	NR55R (C2)	
NC121 (C1)	NC804 (B1)	NJR132 (B2)	NJR302 (C2)	NR113 (C1)	NR56L (D1)	
NC124 (C1)	NC901 (C0)	NJR133 (A1)	NJR303 (C2)	NR114 (C1)	NR56R (D1)	
NC125 (C1)	NC902 (C0)	NJR134 (A1)	NJR304 (C2)	NR115 (C1)	NR57L (B2)	
NC190 (A2)	NC903 (B1)	NJR135 (A1)	NJR305 (C2)	NR116 (B2)	NR57R (C2)	
NC200 (D1)	NC904 (A1)	NJR136 (A1)	NJR306 (C1)	NR117 (B2)	NR601 (B1)	
NC2000 (B2)	NC905 (B0)	NJR137 (A1)	NJR307 (C2)	NR118 (B1)	NR602 (B1)	

*** CONDENSER ***

NC105 (A2)
NC114 (B0)
NC117 (B0)
NC122 (B2)
NC501 (C2)
NC55L (C2)
NC55R (C2)
NC700 (B2)
NC701 (A2)
NC702 (C0)
NC703 (A0)
NC704 (B0)
NC902 (A0)
NC903 (C2)

*** RESISTOR ***

NR555 (A0)

*** DIODE ***

NZD101 (A2)

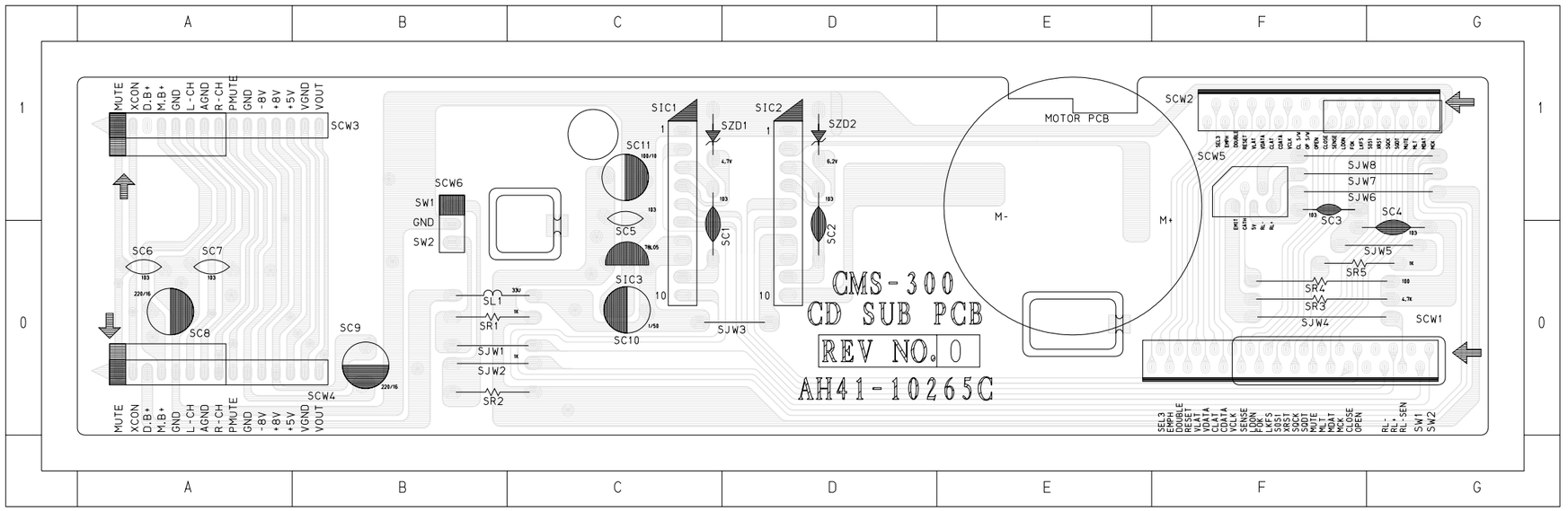
*** TR ***

NIC05 (C2)
NQ1501 (A0)

*** IC&WAFER ***

NCW101 (B2)
NCW104 (A0)
NIC1641 (A2)

10-4-2 SUB



*** RESISTOR ***

SR1 (B0)
SR2 (B0)
SR3 (F0)
SR4 (F0)
SR5 (F0)

*** CONDENSER ***

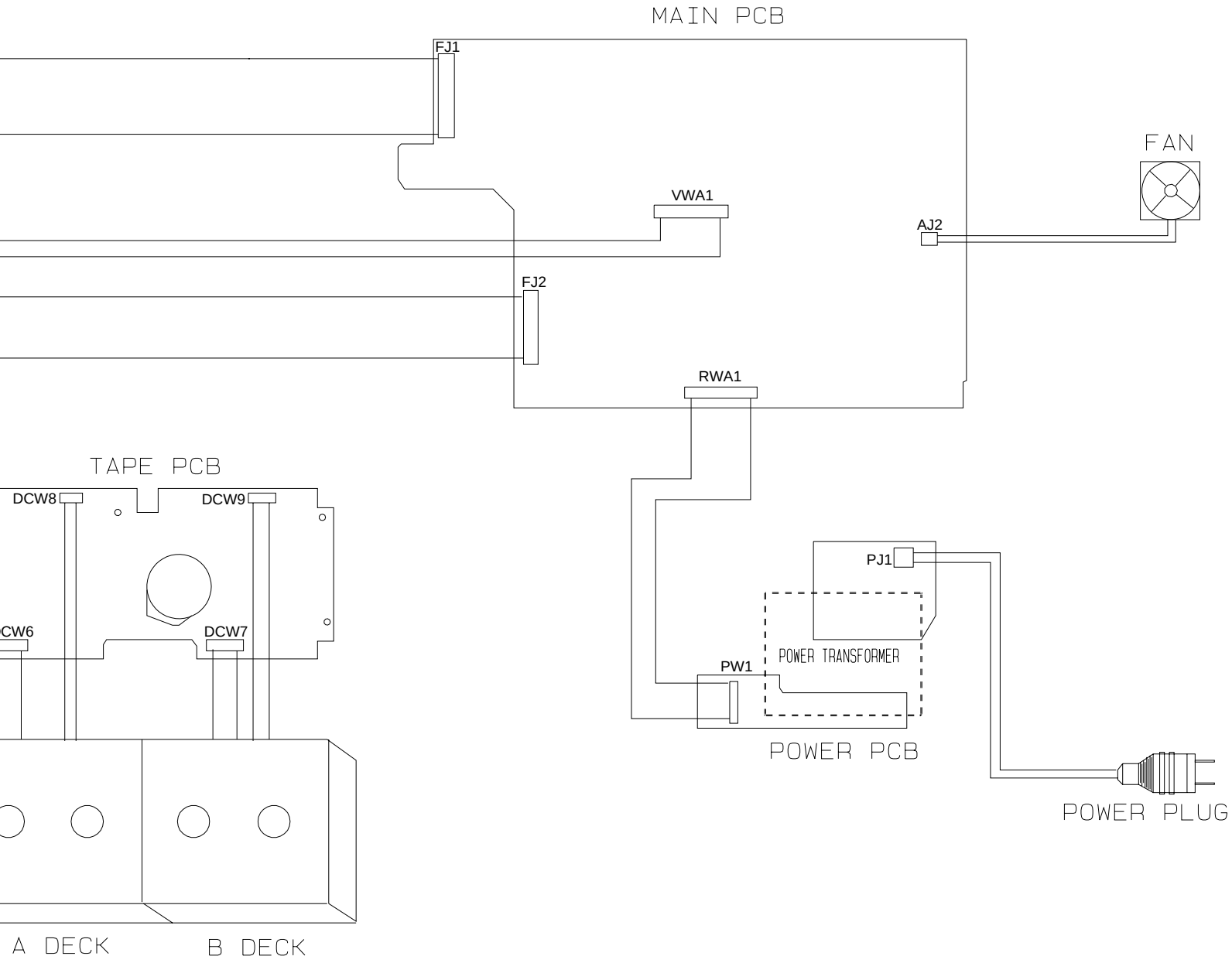
SC1 (C0)
SC10 (C0)
SC11 (C1)
SC2 (D0)
SC3 (F1)
SC4 (F0)
SC5 (C1)
SC6 (A0)
SC7 (A0)
SC8 (A0)
SC9 (B0)

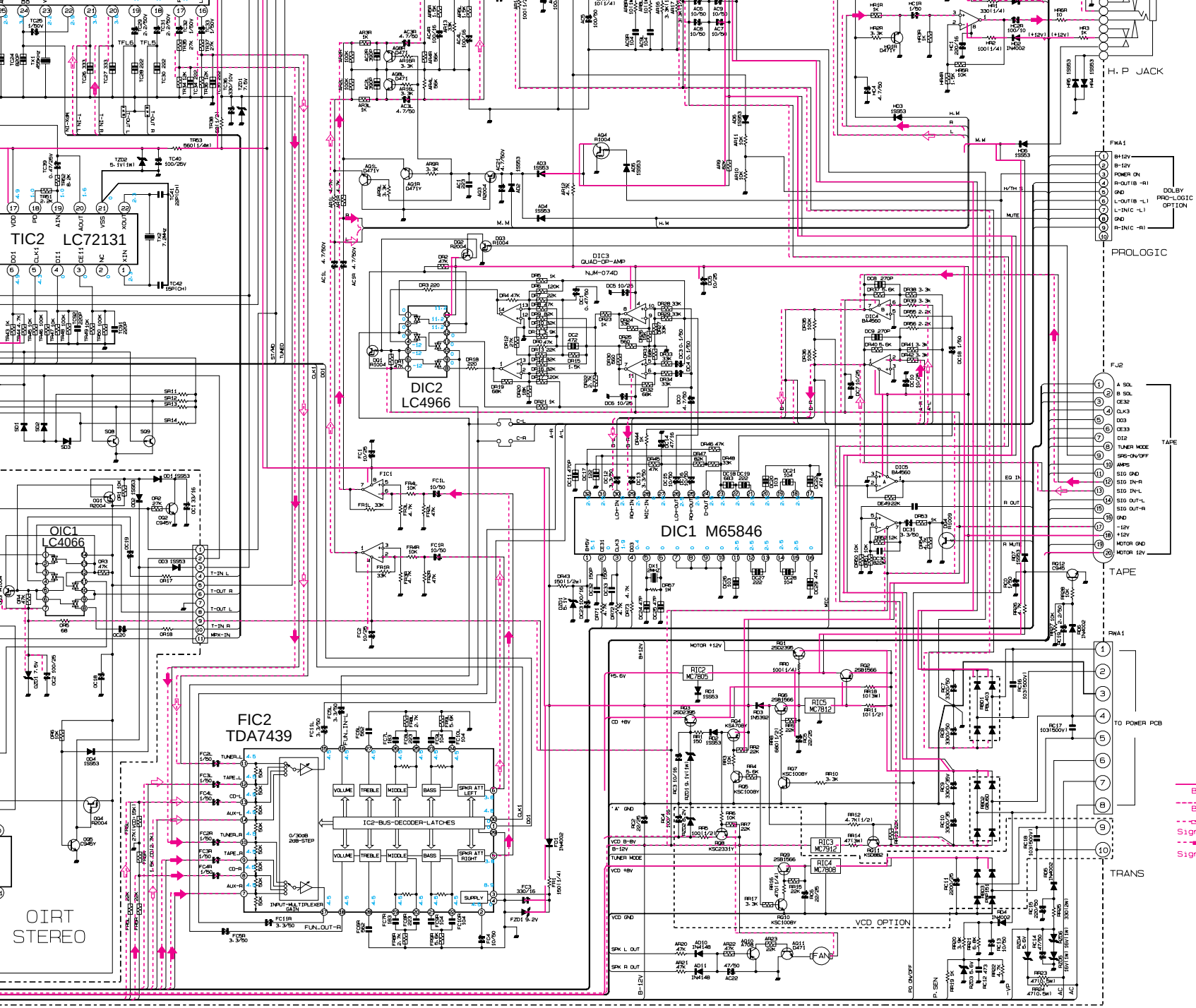
*** DIODE ***

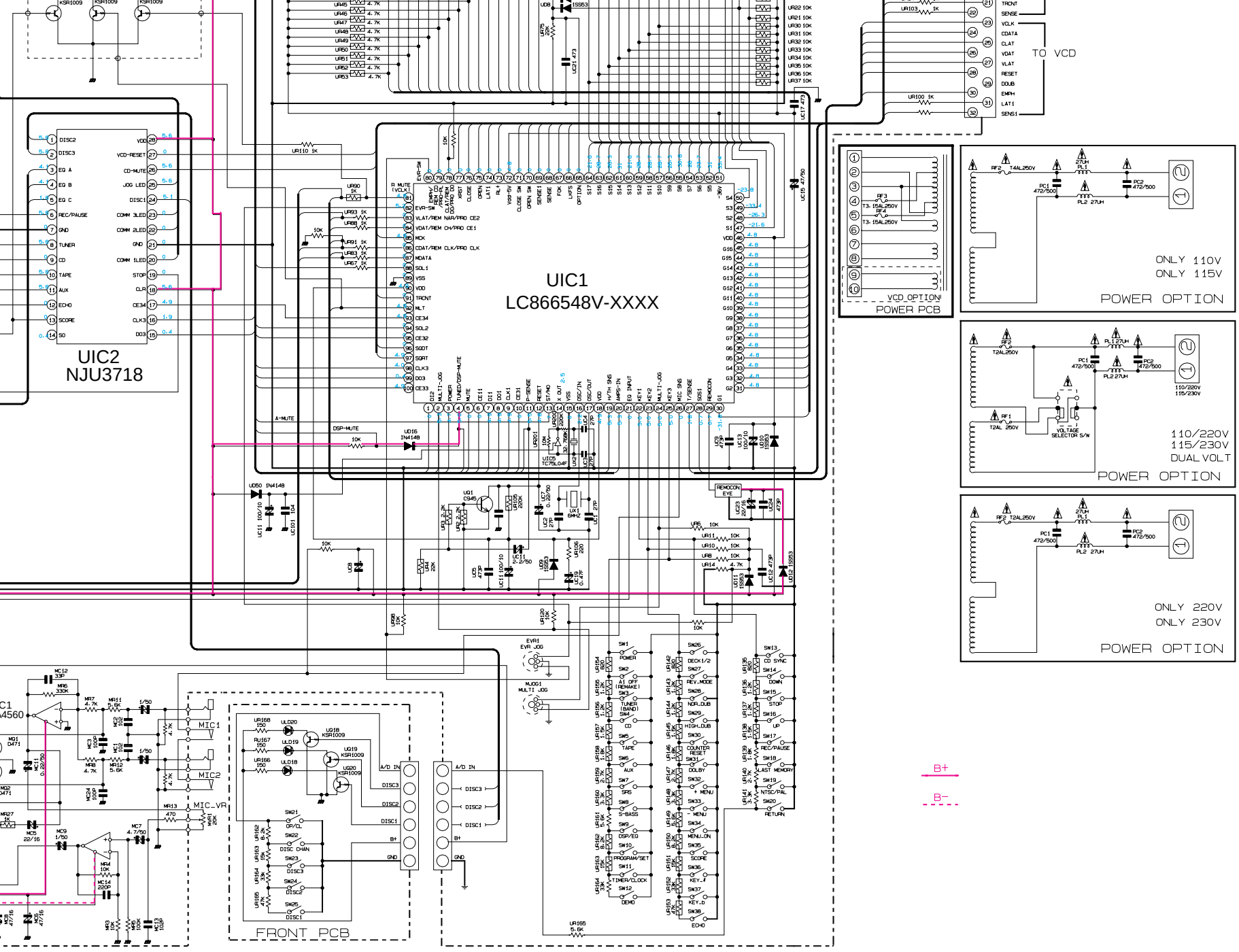
SZD1 (C1)
SZD2 (D1)

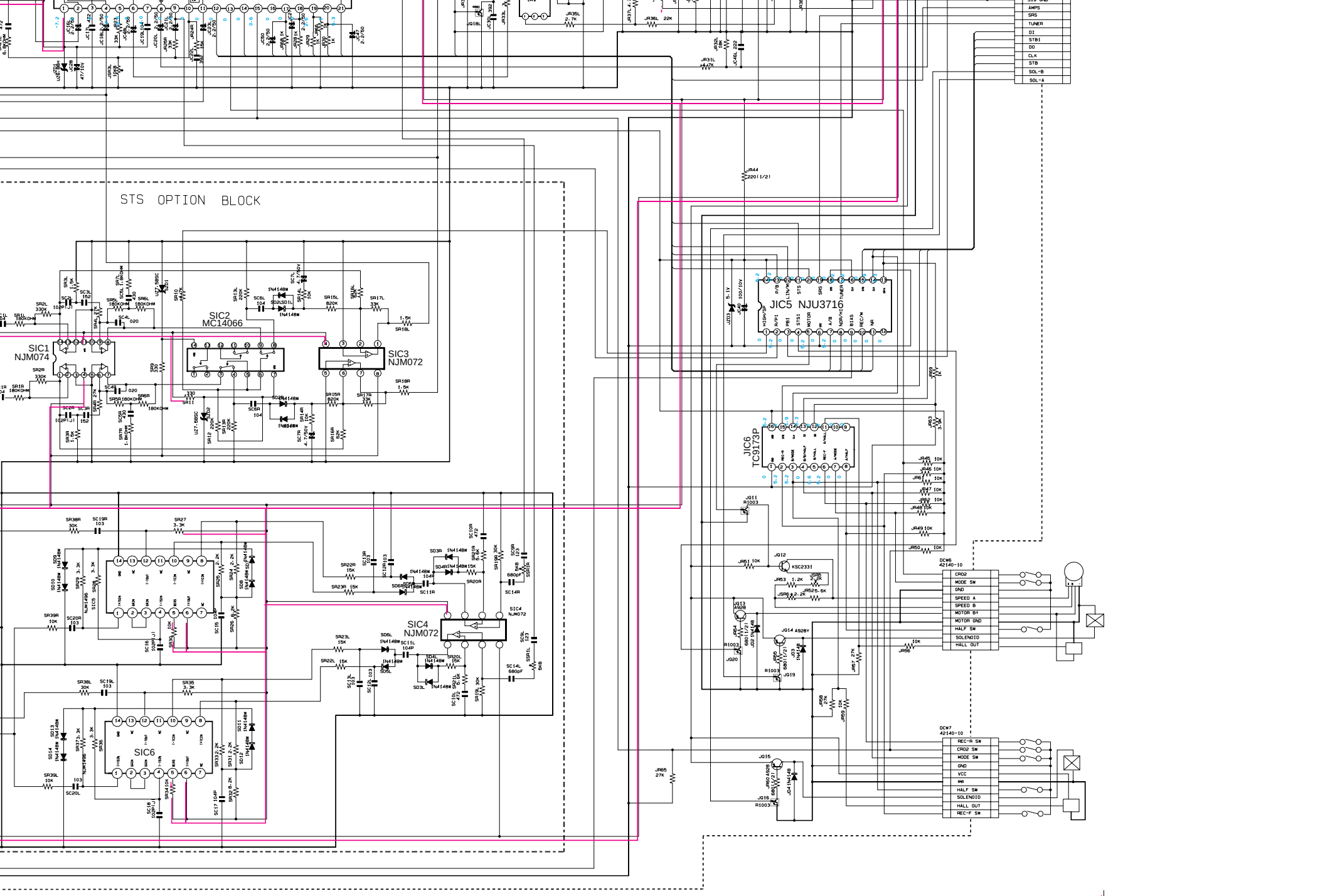
*** TR ***

SIC3 (C0)


MAIN PCB
FJ1
VWA1
FJ2
RWA1
FAN
AJ2
TAPE PCB
DCW8
DCW9
DCW6
DCW7
A DECK
B DECK
PJ1
POWER TRANSFORMER
PW1
POWER PCB
POWER PLUG

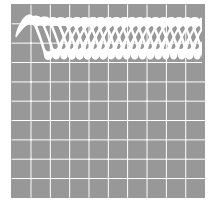

TIC2 LC72131
DIC2 LC4966
DIC3 QUAD-OP-AMP NJM-074D
DIC1 M65846
OIC1 LC4066
FIC2 TDA7439
OIRT STEREO
H. P JACK
PROLOGIC
DOLBY PRO-LOGIC OPTION
TAPE
TO POWER PCB
TRANS
VCD OPTION
IC2-BUS-DECODER-LATCHES
INPUT-MULTIPLEXER
VOLUME
TREBLE
MIDDLE
BASS
SPKR ATT LEFT
SPKR ATT RIGHT
SUPPLY
RIC2 MC7805
RIC5 MC7812
RIC3 MC7912
RIC4 MC7908
B+
B-
Signal-L
Signal-R


UIC1
LC866548V-XXXX
UIC2
NJU3718
TO VCD
VCD_OPTION
POWER PCB
ONLY 110V
ONLY 115V
POWER OPTION
110/220V
115/230V
DUAL VOLT
POWER OPTION
ONLY 220V
ONLY 230V
POWER OPTION
FRONT_PCB
MIC1
MIC2
MIC_VR
A-MUTE
DSP-MUTE
B+
B-

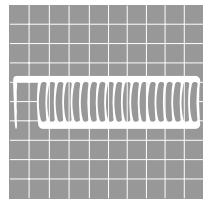

STS OPTION BLOCK
SIC1
NJM074
SIC2
MC14066
SIC3
NJM072
SIC4
NJM072
SIC6
JIC5 NJU3716
JIC6
TC9173P
DCM6
42140-10
CRO2
MODE SW
GND
SPEED A
SPEED B
MOTOR B+
MOTOR GND
HALF SW
SOLENOID
HALL OUT
DCM7
42140-10
REC-R SW
CRO2 SW
MODE SW
GND
VCC
HALF SW
SOLENOID
HALL OUT
REC-F SW
AMPS
SRS
TUNER
DI
STBI
DO
CLK
STB
SOL-B
SOL-A

AUDIO FL
SERVO FL
5V LINE

1



2



NIC9286
KS9286
DSP&D/ACON

3-CD
SIC1 LB1641

SUB PCB

	8V	8V	45			0V	0V
0V	5V	5V	46			0V	0V
	5V	5V	47				
2.5V	0V	0V	48				
			49				
	2.5V	2.5V	50				
	2.5V	4.5V	51				
	2.5V	4.5V	52				
0V	0V	0V	53			0V	0V
			54				
			55				
			56	5V	5V		
2.5V	2.5V	4.5V	57				
5V	2.5V	4.5V	58				
	2.5V	2.5V	59				
			60				
0V	8V	8V	61			0V	0V
2.5V	8V	8V	62			0V	0V
	2.5V	2.5V	63				
			64	0V	0V	0V	0V
5V	2.5V	2.5V	65			0V	0V
	2.5V	4.5V	66				
	2.5V	4.5V	67			0V	0V
0V	0V	0V	68				
			69				
			70	5V	3.8V		
			71	2.5V	2.5V		
			72	5V	5V		
			73			0V	5V
5V			74			5V	5V
			75				
0V			76				
			77			0V	0V
			78				
0V			79			5V	5V
0V			80	0V	0V	0V	0V

SERVICE BULLETIN

ProDuct : AUDIO	Bulletin No. : 98-AUD-E0003
MODEL : See below	Bulletin Date : Aug 14.1998
Buyer : See attachment	ECN & data : Aug 13.1998

SUBJECT : Service Guide for model employed the new speaker

- Application Models : MAX-805,818,838,858(R),868,878,888,858P

Background : Change to new speaker(SS-SPK)

Cause : Change to model name

Solution : Refer to old Service Manual for the service(See below table)

Application Date : Running Change

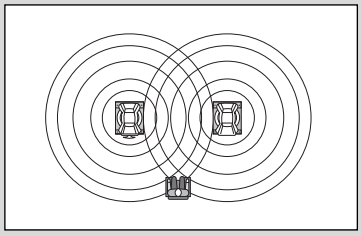
NO	Old Model Name	New Model Name	Service Manual Code No	Change area	Remark
1	MAX-800	MAX-805	AH68-20181A	PS-445 use	-Refer to old Service Manual for the service.(common)
2	MAX-810	MAX-818	AH68-20173A	SS-SPK use	
3	MAX-820	MAX-828	AH68-20186A	SS-SPK use	
4	MAX-830	MAX-838	AH68-20186A	SS-SPK use	
5	MAX-850(R)	MAX-858(R)	AH68-20176A	SS-SPK use	-Space Surround Speaker (SS-SPK)
6	MAX-852P	MAX-858P	AH68-20195A	SS-SPK use	
7	MAX-860	MAX-868	AH68-20176A	SS-SPK use	⇒ Refer to next page
8	MAX-870	MAX-878	AH68-20177A	SS-SPK use	
9	MAX-880	MAX-888	AH68-20177A	SS-SPK use	

Attachment Schematic Diagram ( ) Component Lay-out ( ) Schematic Diagram ( )
Mechanical Diagram( ) None ( ) Others (o)

Published by :	Checked by :	Approved by :

To get the most effective stereo sound

- If possible, position the height of the tweeter of the speaker system at the same height of the ears of the listener to enjoy richer sound.
- It differs according to the structure of the room. Place the speakers at the various positions to find out the optimum position. Then you will enjoy better sound.

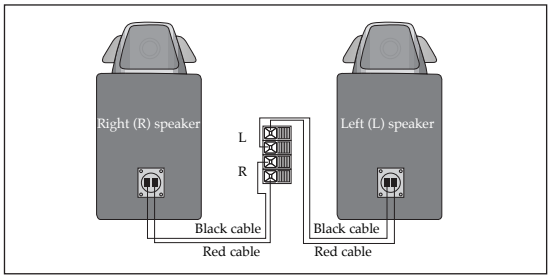


Maintenance

- Clean the system with a soft cloth applied with mild detergent or water.
- Do not use thinner, alcohol, or benzene, which peels off the paint or makes stains on the surface.

Connecting the speakers

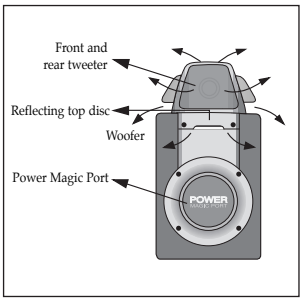
- Turn the power of the amplifier off before connecting the speakers.
- Connect the speakers using the cable enclosed with the speakers as the figure shown below. The red cable should be connected to the red terminal on both the speaker and the amplifier and the black cable to the black terminal on both. Besides, the left(L) and right(R) should be matched.
- Connect the speaker cable to the terminal accurately. If it is connected inaccurately, there may be no sound or noisy sound. Furthermore, if the +, – cables touched each other, the amplifier may be damaged.
- If the polarity of the connection is reversed, the sound quality will be lowered badly and the stereo sound will not be produced owing to the phase condition of the left and the right. Take great care to connect the speakers in phase.



About the 360° Space Surround

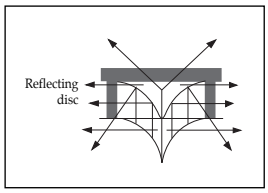
The 360° Space Surround Speaker System

- reproduces the sound of the musical instrument more naturally than the regular speakers.
- It is because that this speaker system reproduces the sound on the same principle as the resounding of the musical instrument.



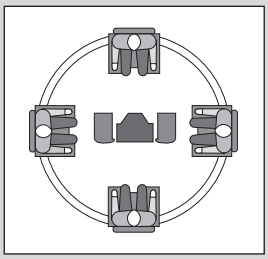
Reflecting top disc

- reflects the sound uniformly in all direction. Therefore, you can hear the same sound all around the speaker system.



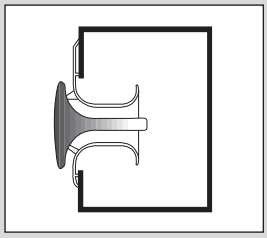
The 360° Space Surround Speaker System

- provides all the listeners around the speaker system with the same quality and volume of the sound.



Power Magic Port™

- reproduces the rich and dynamic bass sound. Especially, by the dynamic range of the medium and low frequency response, the noise generated through the port is reduced effectively to reproduce the clear bass sound.



※ Power Port™ is the patent of Polk Audio in U.S.A. Samsung Electronic has the manufacturing license to produce it.

*Note : Design and Specfication are subject to change upon improvement without prior notice.